

SOCIAL SCIENCES AND HEALTH SERVICE DEVELOPMENT IN INDIA

**Sociology
of Formation
of an Alternative
Paradigm**

DEBABAR BANERJI

01931

The book contains a sociological analysis of a large volume of knowledge on social science aspects of health and health services in India, generated over a period of more than thirty-five years. This has led to the formation of an alternative paradigm. This can be considered as a Third World's response to the West, not simply in social sciences in health and health services but also an alternative pathway for generation of knowledge for public health practice and in building alternative concepts and methods in social sciences as a whole, which are rooted in the specific conditions prevailing in such countries. Despite very substantial support received from foreign countries and the large volume of work done in India using the Western model, it has not been to build a sound body of knowledge in this field. This approach is considered as apolitical, ahistorical and atheoretical. In a parallel endogenous effort to build an alternative, instead of telling people what is good for them or what they should do or how they should behave, the approach is 'go to the people and learn from them' to develop people-oriented technologies and to build organisational and managerial structures for health programmes. This led to the consideration that health service development is a political process which is shaped by modes of production and production relations. Going further still, study of political economy of health, health services, nutrition and population control led to study of dynamics of the fundamental socio-cultural processes which are rooted in the ecology and history of the country.

Rs. 150 (India)
US\$ 20 (Foreign)

To Hari Narayan,
with regards,

~~D. B. Bandyopadhyay~~

At m. D. L. H. J., June, 27, 1885

2

SOCIAL SCIENCES AND HEALTH SERVICE
DEVELOPMENT IN INDIA

By the Same Author

Family Planning in India: A Critique and a Perspective (1971)

Poverty, Class and Health Culture (1982)

The Making of Health Services in a Country: Postulates of a Theory (1985)

Health and Family Planning Services in India: An Epidemiological, Socio-cultural and Political Analysis and a Perspective (1985)

(Available from Lok Paksh)

01931

HP-100

COMMUNITY HEALTH CELL
326, V Main, I Block
Koramangala
Bangalore-560034
India

SOCIAL SCIENCES AND HEALTH SERVICE DEVELOPMENT IN INDIA

Sociology of Formation of an Alternative Paradigm

DEBABAR BANERJI



LOK PAKSH

1986

First Published in 1986

© Author, 1986

No part of this book can be reproduced for commercial use without prior written permission of the publisher.

COMMUNITY HEALTH CELL
326, V Main, 1 Block
Koramangala
Bangalore-560034
India

Price Rs. 150 (India)
US \$ 20 (Foreign)

01931
HP-100

Published by

Disha Banerjee, on behalf of Lok Paksh, Post Box 10517,
New Delhi-110067

Printed by

Lohia Composing Agency at Sunil Printers, Naraina, New Delhi-110028

DEDICATED TO

THE HUNDREDS OF MILLIONS OF THE OPPRESSED WHO HAVE
BEEN 'TARGETS' OF MOTIVATIONAL MANIPULATION,
VICTIM BLAMING AND SOCIAL MARKETING

Preface

The Research Committee on the Sociology of Medicine of the International Sociological Association had agreed to my suggestion that I organise a Session on India's long experience in the use of social sciences in the field of health and health service development for the Eleventh World Congress of Sociology. It was meant to be a study of sociology of knowledge of social sciences in health fields in India. Over the past thirty-five years, considerable amount of work has been done to find ways of dealing with problems of health and sickness in this country. Sociologically, this meant considerable interaction between the people of India and their problems of health and health service development on one side and a body of knowledge and practice based on science (including social science and technology), on the other. The fact that this interaction has taken place within a society which is sharply polarised in terms of classes, where the ruling class had actively sought to become heavily dependent on assistance from Western countries has made this sociological phenomenon all the more stimulating. A parallel movement to develop an alternate endogenous paradigm for social sciences imparted yet another interesting dimension to the proposed study.

This, obviously, was a very formidable task. It meant going back in time as far as thirty-five years or more to reconstruct, as far as possible, the key elements of the setting which led to the growth, development, stagnation or decay of different strands of the knowledge. As an historical study, it required identification and subsequent location of the information needed for this purpose. Although for conducting such a study of sociology of knowledge it was necessary to have an overview

of the studies, this presentation should not be considered as a comprehensive review.

I had to encounter a number of problems in locating and obtaining information and organising them for this presentation. Findings from many important studies have not even been put down in writing. I had to fall back on secondary sources of information or on the observations of persons who had been involved in these studies, directly or indirectly. It had been a very difficult task to locate and obtain many other reports which have not proceeded beyond the mimeographed form. There have also been considerable difficulties in gaining access to published material because they had been published in books and journals which had very limited circulation and the documentation services available in this field are very rudimentary. There was also a pronounced reluctance to part with the needed information among some of those who had them.

Besides, over the past thirty-five years, there have been major developments in the knowledge in the disciplines of health administration, public/community health and social sciences. Therefore, considerable care must be taken to examine the studies in their respective time perspectives. Furthermore, while efforts have been made to present the information on different subject areas in a chronological order, this was not always adhered to strictly when it was felt that it tended to hamper the flow, or when there was an overlap.

For a study of this kind and magnitude, which is carried out under the very severe resources and time constraints, it is inevitable that there would be many flaws, shortcoming and infirmities in this presentation. I earnestly hope that at least the major ones will be identified in the course of the many discussions and exchange of views that will take place in the coming months and years. This is meant to be discussion document. Comments and criticism are most welcome.

I have made the presentation in four Parts. I have discussed the scope of social science work in health fields in Part One to provide a perspective to the presentations and discussions contained in the subsequent two Parts. Part Two covers the social

science studies which are broadly based on Western* models. This constitutes the bulk of the book. There are brief reports and comments on the many health and family planning projects and programmes which have involved social scientists. As a larger number of social science studies are in the fields of health education and family planning, these have been put together in a separate chapter. Part Three leads, step by step, to the formation of an alternative paradigm. This can be considered as a Third World response to the West, not simply in social sciences in health and health services, but also as an alternative pathway for generation of knowledge for public health practice and in building alternative concepts and methods in social sciences as a whole, which are rooted in the specific conditions prevailing in such countries.

Despite the many pangs and heartbreaks, I do get a sense of fulfilment from my labours. I could undertake this venture because I had the privilege of being a teacher at the Centre of Social Medicine and Community Health of the School of Social Sciences of Jawaharlal Nehru University. I also express my gratitude to the Chairperson of the Research Committee on the Sociology of Medicine of the International Sociological Association, Professor Ray H. Elling, for encouraging me to undertake this task. I am also grateful to the three distinguished scholars—Dr. Sushantha Goonatilake of Sri Lanka, Dr. Magdalena Sokolowska** of Poland and Dr. Soon Young Yoon of the United States of America—for agreeing to serve as members of the Panel which would respond to this book (the 'Discussion Document') during the Session at the forthcoming World Congress due to be held in Delhi in August 18-23, 1986.

Locating, identifying and obtaining the documents have taken a very substantial part of the time and effort that has gone in the preparation of this document. I am thankful to Smt. Muni Devi Rastogi of the Documentation Unit of the Centre of Social Medicine and Community Health for assisting me in this very difficult and at times most frustrating task.

*The term, 'Western' is used in this book as a polar opposite : just as the Brandt Commission has used the terms 'North' and 'South'.

**Unfortunately Dr. Sokolowska would not be joining because of illness.

I am thankful to Shri Jeet Ram of Sunil Printers for helping Lok Paksh to bring out the book within an almost incredibly short period of twenty days. Unavoidably, some errors have escaped notice.

DEBABAR BANERJI

Centre of Social Medicine and
Community Health
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067
August 10, 1986.

Contents

Preface

vii

PART ONE

NEEDED KNOWLEDGE BASE

<i>Chapter 1</i>	3—9
Scope of Social Science Contributions	
<i>Chapter 2</i>	10—16
Social Sciences and Health Service	
Development in India	
<i>Chapter 3</i>	17—21
Trends in the Social Science Studies	
<i>Chapter 4</i>	22—25
Early Efforts: Awareness of Social Aspects of	
Health During the Anti-colonial Struggle	

PART TWO

STUDIES BASED OF THE DOMINANT WESTERN REFERENCE FRAME

<i>Chapter 5</i>	29—46
Early Initiatives from Scholars from the	
United States	
<i>Chapter 6</i>	47—60
Health Education and Family Planning	
<i>Chapter 7</i>	61—82
Other Areas of Application	

<i>Chapter 8</i>	
Institutions for Promoting Social Sciences in Health	83—86

<i>Chapter 9</i>	
An Assessment	87—91

PART THREE

ALTERNATIVE APPROACHES

<i>Chapter 10</i>	95—105
Starting from the People	
<i>Chapter 11</i>	106—123
Analysing Family Planning and Community Health Behaviour	
<i>Chapter 12</i>	124—127
New Approaches to Manpower Development and Hospital Administration	
<i>Chapter 13</i>	128—134
Some Other Social and Political Issues	
<i>Chapter 14</i>	135—139
Foundations of Health Service Development	
<i>Chapter 15</i>	140—145
Methodological Developments	
<i>Chapter 16</i>	146—150
An Alternative Paradigm	

PART FOUR

SUMMARY

<i>Chapter 17</i>	153—156
Summary	
<i>References</i>	157—184
<i>Index</i>	185—197

PART ONE

Needed Knowledge Base

CHAPTER 1

Scope of Social Science Contributions

In this presentation, the principal contention is that many important social science areas in health fields have not received adequate attention. Analysis of the causes for this neglect itself forms an interesting area for social science studies. To consider the use of social sciences in health fields, it is helpful to take note of certain broad issues :

1. Often social science issues in health and health services cannot be studied within the confines of individual social science disciplines, like sociology, anthropology, psychology, political science and economics. Concepts and methods of two or more social science disciplines have to be used for that purpose. The approach has to be an integrated interdisciplinary one. For instance, even to study patients in a hospital, who form only one component of a highly complex social and technological system, social scientists are required to study such diverse areas as cultural adjustments of different groups of patients within the hospital, their illness behaviour and sick role and perceptions and attitudes of patients towards different activities that are directed towards them. Similarly, research on community involvement in health service development will require studies of cultural aspects of health, health services, health institutions and health practices, the modes of production and social structures. These should also include analysis of the distribution of power, political organisation, mobilisation of resources and the pattern of their use within the community as well as their effectiveness in the context of the cultural perception and cultural meaning of health problems.

2. It should be recognized that there are certain intrinsic

forces within a society which direct the growth and development of its health services. This is quite apart from purposive interventions of health administrators and social scientists in health services development. These forces are derived from social, political and economic changes which result from complex interactions within a society. Taking India as a case, shifts in the global balance of power led to colonisation of the country by Great Britain. One consequence was the imposition of the Western system of medicine and further decay and degeneration of the pre-existing one. However, colonial rule, in turn, created a dialectic in the anti-colonial struggle, within which the struggle for health became one of its major planks. After India attained independence, this struggle took the form of the struggle for democratisation. As will be discussed later, this social ferment has imparted an intrinsic dynamism to development of health services in the country. The study and analysis of these intrinsic forces thus form an important area of work for social scientists.

3. Health services—promotive, preventive, curative and rehabilitative—form but one of the means of improving the health status of a society. Economic status, nutrition, water supply and other environmental conditions, education, social and political relations, are some of the other factors which influence the health status of a community. In fact, there is a synergistic relationship between these factors and health services. Progress of these fields create conditions for more effective use of health services; reciprocally, effective health services often make significant contributions to advancements in socio-economic status. Like health services, developments in the other fields affecting health are also determined by the intrinsic dynamics of forces within the society. This further widens the scope of work of social scientists in health fields. The monograph *Health by the People* by Newell (1975), provides interesting case studies to elaborate this point. In the case of China and Cuba (Newell 1975:13), spectacular developments in health and services took place as a logical corollary to the fundamental social and political changes in these countries. Cases involving many other countries (Newell 1975:70), (Banerji 1977b), where such changes have been

limited, illustrate how these limitations restrict the scope of development of health and health services in those countries.

4. The intrinsic dynamics of a society, which are so important in determining the status of health and health services, have their roots in the ecological and historical background of the society. Human groups interact with their surroundings to develop their own ways of life—their cultures, which includes modes of production and social relations. The history of these groups is a record of this interaction over time. Consideration of the social ecological setting is also important in analysing the generation of health problems within a human group; social ecological conditions also mediate between the disease causative agents and individuals and are often direct causative agents. The perception and meaning of health and health problems, the formation of various health institutions and practices and health behaviour of individuals are manifestations of a people's cultural response to problems of health and disease (Banerji 1982a:2), (Banerji 1985a:4).

An historical interpretation of the socio-cultural processes emanating from interactions between a human group and a social ecology thus forms the foundations of social science studies of health and health service development. Obviously, because of specific historical and ecological considerations, different modes of production and production relations, societies will differ in their socio-cultural status. Correspondingly, the status of health and health services will also vary. Therefore, an important social science consideration is that the socio-cultural status of a society defines the limits of its health and health service development (Banerji 1985b). Health workers, including some social scientists, may work to ensure the development of health and health services only within given socio-cultural limits.

However, as the socio-cultural process is dynamic in nature, driven by historical forces, there is also a provision for widening the scope of social science activities in health. Furthermore, if a given socio-cultural situation is considered to be too stifling and social scientists and other health workers cannot make a contribution, the struggle for health and health services development becomes a more overt political struggle to widen the scope

for socio-cultural development, so that there is a wider scope for health and health service development (Banerji 1978d).

Contrariwise, there is also a possibility for social scientists to play a counter-productive role by siding with vested interests and actively resisting or retarding the forces of progressive socio-cultural change. Or they may divert attention to other less relevant or even to irrelevant issues, (Banerji 1985a:315-16), (Banerji 1978d).

Of late, there has been much more detailed analysis of the relationship between health and health service development and socio-cultural and economic conditions (see, for example, Banerji 1985a; Banerji 1984d; Illich 1977; McKeown 1976; McDermott 1969; Indian Council of Social Science Research and Indian Council of Medical Research 1981). These have opened up additional dimensions for social science study. Three examples will be mentioned here.

One concerns the rapid rise in the life expectation at birth in India during 1941-61 (Census of India 1981). This has happened even though there has been no significant improvement in the standard of living. There has been no improvement in the nutritional status, nor has there been an increase in the access to health services among the vulnerable groups of the population (Banerji 1981c), (Government of India 1982), (Dandekar and Rath 1971). This phenomenon of increase in life expectation without corresponding improvements in other critical areas has profound social and political implications. Persons who manage somehow to survive under unfavourable economical conditions become more vulnerable to social and political control.

The spectacular demographic changes observed in Sri Lanka (Sri Lanka Ministry of Health 1981) and Kerala (Panikar and Soman 1983), even when the economic conditions are not very favourable, raise many critical social and political issues. In these countries, improvements in birth and death rates is attributed to higher levels of literacy, particularly female literacy, some land reforms, more efficient food distribution system and greater access to health services (Gunatilleke 1984).

However, this claim also raises the question of the indices used to measure health. Even though these two populations have much more favourable birth and death rates than in other

parts of South Asia, it is often overlooked that people in Kerala and Sri Lanka have high morbidity rates due to various communicable diseases, undernutrition and malnutrition, environmental conditions in the form of access to potable water supply, sanitary latrines and housing are as bad as in the other populations and there is considerable poverty and unemployment. At most, the people of Kerala and Sri Lanka can be called less unhealthy; they certainly cannot be called healthy. Why then these two countries are held out as examples of Third World countries which have solved their health and population problems (Gunatilleke 1984), (Eckholm 1977)? What are the political motives in this exaggeration?

Following this trend, a school of thought has emerged in advanced industrial countries which is more technocentric in its advocacy for health service development in poor countries of the Third World. It pleads for what it calls 'Selective Primary Health Care' (Walsh and Warren 1980), (Boland and Young 1982), which envisages selective application of certain cost-effective, simple technological devices in the hope of making a major dent on mortality rates, particularly rates of infant mortality. The selective approach is obviously an 'above-down' approach. Its advocates consider the 'below-up' approach of the Alma Ata Declaration (World Health Organization and UNICEF 1978), with its emphasis on social control over technology, integration of health services and intersectoral action, as desirable but unrealistic. The United Nations Children's Fund (UNICEF) also seems to be moving in this direction (Grant 1984), (Grant 1983) : they have launched a massive social marketing programme to promote child survival by selectively emphasising use of growth chart, oral rehydration, breast feeding and immunisation (GOBI) through a special campaign. This selective approach is based on some rather uncomfortable managerial, technological and epidemiological assumptions : that the alternative programmes suggested are indeed cost-effective and they can be implemented more effectively through an administrative system which is considered to be incapable of running a permanent, integrated programme ; that the technological interventions will yield the desired results ; and that its epidemiological impact will be such as to result in appreciable increase in child survival. Even

more uncomfortable is the sociological assumption that the mothers do not adequately value the survival of their children and they can be taught to do so by skilful use of media of mass communication by foreign experts in social marketing. Still more disturbing is the absence of any blueprint to ensure a more dignified life to the children who are sought to be kept alive by technological intervention through programmes imposed on the people from outside—even outside the country. As things are, even in the very doubtful event of success in increasing child survival, the surviving children will still be condemned to lives of degradation in a hostile ecological, social and economic conditions (Banerji 1986a). This adds at most marginally to improvement in their health status. It is the responsibility of social scientists to draw attention to the important social implications of embarking on such selective actions (Banerji 1984c).

Health and health service development thus remains basically a socio-cultural process (Banerji 1985b). For the deprived sections of populations, particularly in the Third World, the struggle for health and health services is a part of the struggle to wrest their rights from their tormentors.

However, socio-cultural processes, by themselves, do not lead to health and health service development. They merely generate aspirations among the people who can activate the political system (Banerji 1985b). It is the responsibility of the political leadership to articulate the people's aspirations in the form of political commitment (the so-called political will) and political action. Political action includes allocation of priorities for health and health services, mobilisation of resources and policy formulation and initiation of the required administrative processes. Studies of the process of the formation of social aspirations, their political articulation leading to political commitment and action are examples of areas where social scientists can make significant contributions.

Following political action, the involvement of the community, choice of technology and its social orientation, manpower development and organization and management of health services are the major tasks to be performed by health administrators to meet the aspirations of the people. This, obviously, needs epidemiological and sociological approaches

(Banerji 1985a : 308). There is thus a very extensive field for social science studies in health. It may be emphasised that while it is very important to understand the critical role of socio-cultural and political forces in health and health service development, social science considerations in the policy formulation, planning, implementation and evaluation of health programmes constitute by far the most extensive area for application of social sciences.

Health service development is thus a socio-cultural process, a political process and a technological and a managerial process, involving epidemiological and sociological approaches. These three levels of action provide a comprehensive frame of reference for use of social science in health fields. These aspects will be elaborated in Part Three of this book.

CHAPTER 2

Social Sciences and Health Service Development in India

There are many factors which determine the use of social sciences in health service development in a country like India. From the side of health administrators, its use requires a commitment to development, a concern to increase effectiveness of services and, most important of all, a sensitivity to the interdisciplinary nature of health administration. In this interdisciplinary context, health administrators are required to have a capacity to identify the social science issues in health service development and take active steps to involve social scientists so that they are able to make their contributions as members of an interdisciplinary team. It may be noted that because the importance of social sciences has been recognised only recently, health administrators have a special responsibility to create favourable conditions of work for social scientists and ensure that the results of their studies are adequately utilised in the course of complex process of development of health services.

From the side of social scientists, it is necessary to have scholars who have strong foundations in the methods and concepts concerning those aspects of the many social science disciplines which are relevant to health fields. Additionally, they should have the capability to visualise health services as a complex system with interdisciplinary dimensions, make social science contributions for health service development and have interpersonal competence to participate effectively as members of interdisciplinary teams. Just as health administrators are required to be sensitive to social science issues and consider social scientists as equal members of the team, social scientists

have to reciprocate this gesture by making necessary adjustments from their side.

The above factors determining the use of social sciences in health fields in a country like India raises important questions involving the sociology of knowledge. Obviously, to respond to the political concern to make medical and health services more meaningful to the people of India (particularly to the deprived sections), mere grafting or even adaptation of the knowledge of the discipline of health administration as it has developed in the affluent industrialised countries will not be enough. The intellectual challenge to scholars in health administration in India is to build, wherever needed, an alternative body of knowledge (often called New Public Health) that is rooted in the cultural, social, political, epidemiological, administrative and economic conditions of the country (Banerji 1985b), (Banerji 1986c), (Mahler 1986). In this process they will need assistance from social scientists.

The task is even more complicated for social scientists wishing to work in health fields in India. To develop a meaningful approach in many areas of knowledge, they have not only have to get away from what has been termed as the 'Western reference frame' (Singh 1973), and build an alternative body of social science knowledge which is rooted in the conditions obtaining in the country, but they are also often required to distance themselves from the Western reference frames of disciplines such as Medical Sociology, Medical Anthropology and Health Economics, and formulate alternatives. Thus, above all, involvement of social scientists in an interdisciplinary team to build an alternate body of knowledge for the discipline of health administration in India calls for high degree of ethical commitment and competence. As will be noted later on, the failure of some social scientists working in health fields to acquire the needed degree of commitment and competence has created major problems.

There are also powerful retrograde forces in the generation of needed knowledge. The class bias of the scholars, the lure of becoming dependent on foreign scholars and on the 'Western reference frame' and active interest of some foreign scholars in promoting such dependency have been some of the other factors which have influenced the formation of knowledge of social

science in health fields in India. As pointed out earlier, because of the nature of the power structure in the country, sometimes retrograde forces are actively nurtured to draw attention away from the task of building an alternate body of knowledge. The crutch of foreign dependency comes particularly handy to these who find themselves wanting in competence to face the challenge. Their intellectual insecurity makes them particularly attractive candidates for application of what Stanislaw Andreski (1972) has picturesquely designated as 'the Law of Lighter Weights Going to the Top'.

Influence of both types of social forces in the formation of knowledge of social sciences in health fields is discernable in the case of India. During the anti-colonial struggle, to mobilise the masses, the leadership made promises to have an egalitarian system of government after independence was achieved. This mobilisation generated a process of democratisation, which was continued even after the country attained independence. However, this trend went against the interests of the new ruling class, which took over power from the British. This generated a counterforce in social studies. These opposing social forces led to the formation of what Gunnar Myrdal has termed as a Soft State (Myrdal 1968 : 243)—egalitarian pronouncements not followed up with appropriate action. In the case of health services, in the wake of egalitarian recommendations of the National Planning Committee of the Indian National Congress (National Planning Committee 1949) and the Bhore Committee (Health Survey and Development Committee) (Government of India 1946) of the pre-Independence days, the successor government of independent India embarked on ambitious programmes for development, showing special concern for the deprived populations in rural areas. This was in the form of setting up Primary Health Centres for providing integrated health services as a part of the wider Community Development Programme, a social orientation of medical education, and special attention to programmes for providing protected water supply; other measures were improving nutrition, promoting the indigenous systems of medicine, the rapid extension of network of rural health services with deployment of a large number multi-purpose workers, culminating in the decision of 1977 to entrust 'people's health

in people's hands's by providing one Community Health Worker for every 1000 rural population (Banerji 1985a : 23).

The negative social forces, which emanated from the ruling class, have hampered the implementation of these very laudable intentions. As pointed out by Myrdal (1968 : 20), the national political leaders were all members of the privileged upper class. Their new positions of responsibility and power rapidly invested them with still greater privileges. Many, who had borne heavy burdens or undergone personal sacrifice in the independence struggle saw in their own advancement a symbol of the national political revolution. Also, as politics become increasingly concerned with practical issues and the pressure of vested interests on them grew stronger, a new type of politician with few ideological inhibitions about working for special interests invaded the political scene.

The 1982 Statement on National Health Policy of the Government of India (Government of India 1982) very well sums up the consequences of this class bias of the leadership on health service development in India. In spite of impressive progress (the Statement says), the demographic and health picture of the country still constituted a cause for serious and urgent concern. The high rate of population growth continued to have an adverse effect on the health of the people and the quality of their lives. The mortality rates for women and children were still distressingly high ; almost one third of the total deaths occur among children below the age of 5 years ; infant mortality was around 129 per thousand live births.

Efforts at raising the nutritional levels of the people have still to bear fruit and the extent and severity of malnutrition continue to be exceptionally high. Communicable and non-communicable diseases were still to be brought under effective control and eradicated. Blindness, leprosy and tuberculosis continued to have a high incidence. Only 31 per cent of the rural population had access to potable water supply and five per cent enjoy basic sanitation.

The Statement noted that high incidence of diarrhoeal diseases and other preventable and infectious diseases, specially amongst infants and children, lack of safe drinking water and poor environmental sanitation, poverty and ignorance as

the major contributory causes of the high incidence of morbidity and mortality.

This was followed by an analysis of the possible causes of this obviously unsatisfactory state of affairs :

The existing situation has been largely engendered by the almost wholesale adoption of health manpower development policies and establishment of curative centres based on the western models, which are inappropriate and irrelevant to the real needs of our people and the socio-economic conditions obtaining in the country. The hospital-based, disease and cure-oriented approach towards the establishment of medical services has provided benefits to the upper crusts of society, specially, those residing in the urban areas. The proliferation of this approach has been at the cost of providing comprehensive primary health care services to the entire population, whether residing in the urban or the rural areas. Furthermore, the continued high emphasis on the curative approach has led to the neglect of the preventive, promotive, public health and rehabilitative aspects of health care. The existing approach, instead of improving awareness and building up self-reliance, has tended to enhance dependency and weaken the community's capacity to cope with its problems. The prevailing policy in regard to the education and training of medical and health personnel, at various levels, has resulted in the development of a cultural gap between the people and the personnel providing care. The various health programmes have, by and large, failed to involve individuals and families in establishing a self-reliant community. Also, over the years, the planning process has become largely oblivious of the fact that the ultimate goal of achieving satisfactory health status for all our people cannot be secured without involving the community in the identification of their health needs and priorities as well as in the implementation and management of the various health and related programmes.

Thirty-five years after Independence, the existing manpower development policies and health institutions still remained predominantly curative and were based on the Western models

which there inappropriate and irrelevant to the needs of the people. Services provided benefits to the upper crusts of society residing in urban areas, showing persistence of the colonial pattern of health services to the leadership of independent India. But the fact that a government policy document should have so roundly disapproved the policies followed by governments of the same political party in the past thirty-five years, and that it now calls for rectification of those defects by 'involving the community in the identification of their health needs and priorities as well as in the implementation and management of health and related programmes', also shows that there are forces of democratisation within the country which have impelled the very same leadership to once again promise a better deal to the people for the future.

Thus, throughout the past century and a half, health services in India have been influenced by two powerful forces which had been pulling it in different directions: the colonial approach, which continues to be nurtured by the privileged class after Independence, pulling in one direction, and the anti-colonial struggle, which after independence took the form of a struggle for democratisation, pulling in another direction.

Against this interplay between opposing social forces, it is understandable that social scientists were involved in the process of health service development at a very early stage. However, problems of getting the desired kind of social science inputs were even more intractable than those encountered in many other disciplines of health administration.

It was recognised very early that the struggle for freedom is not merely a political struggle. Actions in social and economic fields had always been important components of this struggle. This movement for social and economic action had acquired considerable momentum in the later phases of the freedom struggle. Mahatma Gandhi had been an untiring exponent of social and economic programmes based on community self-reliance, social and economic justice and a decentralised democratic polity (Ganguli 1973). He had devoted a great deal of his time and energy to promote what he called constructive programmes (Murti 1970 : 371-73) : 1. Hindu-Muslim or communal unity ; 2. Removal of untouchability ; 3. Prohibition ; 4. Khadi (handspinning and weaving) ; 5. Other village

industries ; 6. Village sanitation ; 7. New or basic education ; 8. Adult education ; 9. Upliftment of women ; 10. Education in hygiene and health ; 11. Propagation of Rashtrabhasha (national language) ; 12. Cultivating love of one's own language ; 13. Working for economic equity. Vinoba Bhave, an intimate associate of Gandhi, had attempted to carry on this work after Gandhi's death (Bhave 1963), (Narayan 1970). Rabindranath Tagore (1961) also had associated rural development programmes (Sriniketan) with activities of Santiniketan.

Along with the various social action programmes, there has also been substantial social analysis. At the beginning of the current century, Dadabhai Naoroji (1962) and Ramesh Chandra Dutt (1968) had made pioneering studies of the problem of poverty in India. Bharatan Kumarappa (1952) and J.C. Kumarappa (1958) had contributed to the Gandhian movement by presenting data to make a case for a village based economic and political order for India. There have also been significant developments in the formation of an endogenous body of knowledge in the social sciences through contributions from nationalist-minded social scientists from many universities. Nirmal Kumar Bose (Sinha 1972), Radhakamal Mukherjee (Singh 1955), D.P. Mukherji (1961), (Singh and Singh 1967), Gyanchand (Bose 1981) and B.N. Ganguli (1973) belonged to this group of scholars.

However, with the new power equations which emerged after the country gained independence, there was a sharp break with this tradition. A new generation of social scientists enthusiastically embraced the reference frame of Western countries with active encouragement from scholars from the UK and USA (Desai 1981).

CHAPTER 3

Trends in the Social Science Studies

Social Science and Health and Family Planning Services

For more than three decades, social scientists have produced a large volume of literature in the course of their work in health fields in India. They have also covered an extensive field—health education, health behaviour in relation to rural and urban health services, family planning, maternal and child health, health systems development, communicable disease control programmes, environmental sanitation, health professions and medical education, socialisation of health professionals, hospital administration, organisational behaviour, health economics, political economy of health, and so on.

As pointed out earlier, the literature on such studies reflects the interplay of the socio-political forces in the country which have influenced the growth and development of health services on one hand and that of social sciences on the other. Apparently to placate the forces of democratisation, the political leadership has launched the programme of establishing primary health centres, bringing about social orientation of education and training of health workers, etc. However, such programmes did not receive the attention they deserved because of preoccupation of the decision makers with development of what the Statement on National Health Policy (Government of India 1982) has called 'hospital-based, disease and cure-oriented approach towards the establishment of medical services which have provided benefits to the upper crusts of society, especially, those residing in the urban areas'.

It is therefore understandable that most of the very limited

resources that were allocated for preventive services were deployed for launching special technocentric mass campaigns against individual diseases, using a military like approach to organisation and management to attack the 'enemy' with 'silver bullets'. The National Malaria Eradication Programme, the Mass BCG Campaign, the three National Smallpox Eradication Programmes, the Leprosy Control Progarmme, the National Trachoma Control Programme and the National Filaria Control Programme dominated the preventive health work during the first two decades after India attained independence (Banerji 1985a : 136) Except for the third attempt in smallpox eradication, these vertical programmes failed to live up to the expectations (Government of India 1982).

Before the general health services could recover from the consequences of failures of the vertical programmes against communicable diseases, another specialised vertical programme—the Family Planning Programme—was assigned an overriding priority (Banerji 1985a : 136). Enormous resources were mobilised to set up an extensive network of services, supported by a large number of institutions for education, training, research and evaluation. Successively, failure of one strategy for population control led to a new one (Banerji 1985a : 175)—from the clinic approach to an extension approach, to popularisation of use of the Intrauterine Device (IUD), to time-bound target approach, to mass camps approach. A sharp turn was taken in 1974 when it was asserted that 'development is the best contreceptive'. There was, once again, a complete turn around when the disastrous intensified family planning drive was launched during the Emergency of 1975-77. Since then while the authorities claim to implement family planning as an integral component of overall socio-economic development programme, essentially, it has once again become a target oriented approach (Bose 1986).

Disappointing results from the vertical programmes against communicable diseases and from special family planning drives brought the attention of the authorities back to the general health services, with primary health centres as the mainstay of rural health and family planning programmes. Health and family planning work was sought to be done in an integrated form through multi-purpose workers (one male and one female

for 10,000 population). Steps have already to be taken to double the number of such workers, with corresponding strengthening of the supervisory echelons and primary health centres. Entrusting of 'peoples' health in peoples hands', by having village communities choose health workers from among themselves, was another decision of far reaching significance (Government of India 1978). This decision was taken by the new government which came into power in the wake of the popular resentment against the intensified family planning drive of the Emergency days (Banerji 1985a:177), (Government of India 1981:373-74).

Thus, since India attained independence, there has been considerable ferment in health and family planning fields in the country. While quite a few of the moves have been counter-productive, taken as a whole, there has been a forward movement. Correspondingly, this has considerably extended the scope of using social sciences in health fields.

However, as mentioned earlier, there is another important facet of the use of social sciences. Not infrequently, social scientists have been employed to lend an aura of legitimacy to certain aspects of health or family planning services which in fact are not sustainable on objective, scientific grounds (Banerji 1980a). This shows how knowledge has been distorted to serve certain interests. This has also raised the question of the social responsibilities of social scientists.

State of Social Sciences in India

The extent of growth and development of concepts and methods in different social science disciplines and capacity of Indian social scientists to respond to the new opportunities generated as a consequence of the growth of health and family planning services are two important and very basic considerations for analysis. A number of work positions were created within the health and family planning organisation to use social sciences. This posed two types of problems : one was to meet the manpower requirements to fill the positions. The other was to ensure that the relevant social science disciplines had strong enough conceptual and methodological foundations to perform the new tasks.

On both the counts the response did not live up to the requirement (Banerji 1973a). As has been repeatedly asserted by many eminent Indian sociologists (Desai 1981), (Singh 1973), (Mukherjee 1973), anthropologists (Roy Burman 1974), (Sinha 1971), (Dube 1978) and psychologists (Singh 1983), (Sinha 1974), (Mukherjee 1980) because of their heavy dependence on what has been called 'Western reference frame', much remains to be done to provide the conceptual and methodological base needed to employ social sciences to contribute to solution of key national problems facing the country. Presumably because of the obviously unsatisfactory state of these disciplines, the latter occupy very low positions in the hierarchy in students' choice of disciplines. Engineering, medicine, senior civil services, physical and biological sciences, business management, economics are some of the disciplines which are preferred to disciplines such as sociology, anthropology or psychology. Even more unfortunate is the fact that as social sciences in health field is still a new area for work, the brighter social scientists prefer to confine themselves to the conventional well-established fields, so that the average quality of social scientists who fill positions in health organisations is even lower than those in the more conventional areas.

Formation of The Two Schools

Because there has been considerable eagerness among health administrators to involve social scientists in health service development, the very inability of social scientists, who were groomed in the conventional school of social sciences, to make the needed contributions has acted as stimulus for creating a new type of social scientists who could get involved in generating atleast some of the concepts and methods needed for this purpose. This has been the most remarkable feature of India's experience in using social sciences in health fields.

The deep and persistent interest of health administrators in involving social scientisis in health fields thus led to the emergence of two different schools of thought: (a) The *conventional school*, which emerged from among the preexisting social science disciplinees and (b) an *alternate school* of thought, which took shape (mostly inde, endent of the preexist-

ing disciplines) specifically to form concepts and methods to develop content of social science OF health service development and social science IN health service development in India. Contributions of these two schools of thought will be discussed in two different Parts of this presentation.

CHAPTER 4

Early Efforts: Awareness of Social Aspects of Health during the Anti-colonial Struggle

An important aspect of the development of social sciences in health fields in India is that well before the advent of professional social scientists in this field, the leadership of India's anti-colonial struggle had shown considerable awareness of social aspects of health and health services. As early as in 1920, the Indian National Congress, which spearheaded the independence movement in India, had passed a resolution (Government of India 1948) to the effect that considering the widely prevalent and generally accepted utility of the Ayurvedic and the Unani systems of medicine in India, earnest efforts should be made by the people of India to popularise schools, colleges and hospitals for instruction and treatment in accordance with these systems.

In the course of mobilising people for the struggle, Mahatma Gandhi (1927) had realised the need for promoting self-reliance among people by encouraging them to develop capacity to cope with their own health problems. He had been a pioneer in involving people in activities of health promotion and prevention through improving environmental sanitation and living in harmony with the surroundings and using locally available methods, including Naturopathy and Yoga, to cope with problems of sickness (see Murti 1970 : 371-74). He also launched a campaign against stigmatisation of victims of leprosy (Murti 1970 : 376). He set an example by personally dressing the wounds of some of them. (See also Government of India 1957 : 49).

Some of India's most eminent medical professionals, like Dr B.C. Roy, Dr A.R. Ansari, Dr Jeevraj Mehta, Dr Khan Saheb and Hakim Ajmal Khan, occupied leadership positions in the anti-colonial struggle (Banerji 1985a: 14). Delivering the Presidential Address at the All India Medical Conference in Lahore in 1929, Dr B.C. Roy declared (Roy 1982): 'It is not necessary for me to mention that the history of the Government is such that we need not look for help or inspiration from the authorities. If we mean to do anything we shall have to do in spite of the Government. We must organise ourselves. Voluntary organisations have to be formed for social service, for giving aid during epidemics, for medical inspection of school children, for rousing sanitary consciousness among the masses'. He was in favour of admitting Vaid and Hakims to the membership of the Indian Medical Association. Dr Roy concluded the address with a forthright assertion that the Association had an important role in the political struggle that was going on at that time, saying, 'In India, we have never regarded the various affairs of life as being in watertight compartments: politics, technically so called, is intermixed with economic, social and medical problems. If politics means the science of organisation for the purpose of securing the greatest good for the largest number, I declare, we members of the profession dare not keep away from politics'.

The reports (1940 and 1948) of the National Health Subcommittee of the National Planning Committee of the India (National Planning Committee 1948), (National Planning Committee 1949) had crystallized the thinking of the political leadership on health issues. One of the members, Col. (Dr) S. Abdur Rehman, provided profound insights into the sociology of knowledge of the indigenous systems of medicine in India. According to him, the Ayurvedic and Unani systems had made valuable contributions to the Indian culture of healing. With the advance of Western science, medicine took rapid strides which raised it to the level of an international science. As such 'its position of utility to mankind and the common features all over the world despite other differences compel us to recognize that as a scientific phenomenon there can be only one medical system', he observed (National Planning Committee 1949).

Circumstancial constraints isolated the Indian systems from the international stream, and, because of British rule and its prejudices, the Unani and Ayurvedic systems 'fell from the graces of the State and the powers that be' (National Planning Committee 1949). Two centuries of neglect took their toll and the systems degenerated, instead of developing a scientific body of knowledge. In the twentieth century, however, these systems were being revived by pioneers who realised the urgent need of keeping alive practices which had withstood the test of time, of making them part and parcel of international medicine. The greatest of these pioneers, Dr Rehman said, was Hakim Ajmal Khan who founded the Ayurvedic and Unani Tibbia College in Delhi for this purpose. Dr Rehman strongly favoured this scientific revival of traditional systems to serve the particular needs of tropical areas and, after independence was won, his recommendations concerning the setting up of institutions for achieving this were implemented by state and Union governments.

The remarkable foresight of the sub-committee is reflected in the contemporary tenor of the resolution adopted by the National Planning Committee in August 1940, on the basis of the report (National Planning Committee 1948). The integration of the preventive and curative functions in a single state agency was urged, and it was stressed that the maintenance of the health of the people was the responsibility of the state. To meet the immediate situation, the need for training a large number of health workers in practical community and personal hygiene, first aid, and simple medical treatment, with stress on social aspects and implications of medical and public health work, was emphasised. The report of the National Planning Committee (1949) categorically stated that 'the corner-stone of the scheme we recommend is a (Community) Health Worker' (p. 22).

The Health Survey and Development Committee (Bhore Committee) (Government of India 1946), which submitted its report in 1946, was even more emphatic about involvement of people in health work. According to it (Government of India 1946: 18), the physician of tomorrow :

must be a scientist and a social worker, ready to cooperate

in team work, in close touch with the people he disinterestedly serves, a friend and a leader, he directs all his efforts towards the prevention of disease and becomes a therapist when prevention has broken down, the social physician protecting the people and guiding them to happier and healthier life...

A health organization enriched by the spirit of such a medical profession will naturally work towards the promotion of closest cooperation of the people. It will recognise that an informed public opinion is the only foundation on which the superstructure of national health can safely be built.

Even this very limited reference to the early efforts gives a good example of the importance of the 'intrinsic social forces', referred to in Chapter 1. The very same medical professionals, who were leaders in the anti-colonial struggle, like B.C. Roy, Jeevraj Mehta and Sushila Nayar, occupied important political and administrative positions during the post-independence period. Their actions turned out to be much different from what they have been clamouring for before independence.

PART TWO

**Studies Based on the Dominant
Western Reference Frame**

CHAPTER 5

Early Initiatives from Scholars from the United States

Social Sciences In India

As pointed out in Chapter 2, there was a very sharp break with the tradition of study of social issues that was developed during the anti-colonial struggle after India gained independence. This was, as pointed out earlier, due to changes in the political, ideology and change in the value system of new political leadership of the country. There was rapid expansion in higher education in social sciences. The body of knowledge was borrowed from Western industrialised countries. Such dependency, as Ivan Illich (1977) has remarked, is disabling and addictive. Very few of the exponents of this new trend in social sciences had the depth of scholarship and the strong endogenous moorings of a D.P. Mukerji (1961) or a J.C. Kumarappa (1958).

Analysing aspects of the sociology of knowledge of social sciences in India, Yogendra Singh (1973) has observed that if the test of relevance and scientific quality are applied to social science theories developed in countries, it would be found that the assumptions and value premises implicit in them fulfilled the ideological needs of a particular type of social system. He goes on to point out that most of these theoretical formulations have come from the American tradition of social science and conform to a model of society based on plenty rather than poverty, exchange rather than exploitation, imitative mobility (reference group), rather than class conflict collective mobilisation. They focus on balance rather than breakdown or contradiction in the social system. He concludes that there is a close relationship between the needs of a worldview and socio-

cultural identity of a particular country and the types of social science theorisation. Other prominent social scientists of India—for example, Ramkrishna Mukherjee (1973) and I.P. Desai (1981) in sociology, Roy Burman (1974), Surajit Sinha (1971) and S. C. Dube (1978) in cultural anthropology and Asis Nandi (1974), Biswa Nath Mukherjee (1980) and Durganand Sinha (1983) in social psychology—have all complained about the dominating influence of the Western reference frame and emphasised the need of social sciences in India 'to go native if it has to be creative and relevant to society'. Earlier, in 1973, a Review Committee of the Indian Council of Social Science Research (1973 : 62) had observed. 'Much of the current research effort has no relevance to contemporary social and national problems and suffers besides from lack of rigour in its analysis of phenomena and synthesis of facts. It is largely oriented to micro-level research to the neglect of macro-level problems. It has not yet emancipated from its tutelage to Western theories and has failed to develop research tools, designs, and models of its own, appropriate to the Indian situation.' Despite the firm diagnosis made by some of the most eminent social scientists of the country more than ten years ago, nothing very striking has emerged in any of the disciplines. Why is this so? Why, in the first place, did the scholars opt for the Western frame? Why did it take them such a long time to 'discover' the irrelevance of the Western model? Interestingly, no efforts have been made to answer such important questions in the sociology of knowledge.

It may be added that adoption or imposition of the American tradition of social science in India referred to by Yogendra Singh (1973) is itself a very interesting area for social science research. Some US scholars, like Demerath (1976) have linked it with the imperatives of the US foreign policy and imposition on dependent Third World countries terms of trade which favour USA.

Initiatives of Ford And Rockefeller Foundations

As can well be expected, two cultural anthropologists from foreign countries—McKim Marriot (1955a), who was then a Fellow for the Ford Foundation in India and Morris Carstairs

(1955), who was a Rockefeller Research Fellow from Cambridge University, were among the first to carry out 'formal' social science studies in health in India. Both of them lived in villages for considerable periods to present the contrast between Western and rural Indian medicine in terms of doctor-patient relationship.

Marriot (1955a) carried out his study in the village Kishan Garhi in Aligarh District of Uttar Pradesh in 1952. He attempted to analyse the cultural problems involved in introducing what was considered to be more effective medical techniques to a 'conservative' village. He describes the overall social organisation of the village, then analyses the village medical institutions in particular, and finally re-examines the role of the Western doctor as it appears to villagers in the context of their own social organisation and their own medical institutions. Analysis reveals several contrasts and conflicts that have existed in the past between the roles assumed by indigenous and by Western medical practitioners, conflicts that have acted as obstacles to the spread of Western medicine. The analysis also points to certain resemblances between the roles of indigenous and Western medical practitioners and suggests how some of these resemblances might be exploited in establishing what the author terms as 'scientific bridgeheads.' The successful establishment of effective medicine here appears to the researcher to depend largely on the degree to which 'scientific medical practice can divest itself of certain western cultural accretions and clothe itself in the social home spun of the Indian village.' The value position of the researcher is quite obvious.

Carstairs (1955) conducted his studies in 1951 and 1952 in two villages—Surajpur and Delwara—located in the extreme north of the then Udaipur State. He is familiar with this region because his father was a missionary and he grew up there. Significantly, he starts his presentation with a reference to a short story by Rudyard Kipling where he describes how a young district officer persuaded a frightened village community to submit to vaccination by reminding the people that its effectiveness is derived from the sacred cow, and then getting one or two leading men to be the first to undergo it.

His conclusion was that to the people of rural India sickness

is as much a moral as a physical crisis. Villagers can scarcely be expected to change their whole cosmology simply to accord with the outlook of a Western trained doctor. Those who are interested in introducing Western technology in public health and medicine ought to study how they can adapt the roles of the doctor and other health workers to fit in to the existing cultural expectations. In the process they may have to consent to assume the mantle of the priest or the magician. Carstairs hastens to explain that by this he does not mean the Western doctors will themselves subscribe to 'nonrational' beliefs, but simply that they will accept the inevitable fact that their own techniques of healing will be accepted 'irrationally,' as indeed they are for the most part in the West. Carstairs contends that Western health personnel can, however, turn this fact to advantage by dramatising the concepts of infection, sterilisation and chemotherapy for all their worth and by accepting as an asset the quite unscientific awe which the ritual of even minor surgery can inspire. He concludes that these considerations may sound devious and machiavellian, but 'as long as western trained worker remain clear in their own minds about the worth of the contribution they have to make to the community's wellbeing, they will be able to play their roles with that conviction and assurance of ultimate success which the villagers themselves recognize as the hallmark of true potent therapy'.

Both these reports appear among the sixteen case studies brought together and published in 1955 by an anthropologist, Benjamin Paul (1955), then a professor at the Harvard School of Public Health, under the title: *Health, Culture and Community*. There are other eleven cases which also deal with public reactions to health programmes in underdeveloped countries. In the Foreword to this book, Hugh Leavell, then Professor of Public Health Administration at Harvard, had underlined the importance of such studies. This book can be considered as a trend setter in developing curricula for education and training of social scientists in health fields in developing countries. That this book has been reprinted as many as ten times between 1955 and 1976, indicates the popularity of this approach among some social scientists and health administrators.

Involvement of eminent scholars from the Harvard School

of Public Health in the publication of this book marked the beginning of their deep interest in the development of health services of a newly independent country like India. Along with Hugh Leavell and Benjamin Paul, these scholars included, John Gordon, Carl Taylor, Theodore Ingalls, James Simmons and John Wyon. They are, collectively referred here as the 'Harvard Group'.

It is also significant that along with this concern for health problems of India, there was a much deeper concern about the problem of population growth. As early as in 1949, Professor John Gordon and others at the Department of Epidemiology of the Harvard School of Public Health 'became aware that sharp rises in population were affecting their (i.e. the developing countries') plans for control of various community diseases. Anticipated improvement in public health expectedly would result in fewer deaths and thereby accelerate population growth by widening the gap between birth and death rates' (Wyon and Gordon 1971:i). This obviously Malthusian analysis was also underlined by other scholars, who expressed their concern through the United Nations in 1953, observing that 'expanding number of people were cancelling out strong efforts to raise existing low standards of health and wellbeing in many less developed countries' (Wyon and Gordon (1971: ii). John Gordon was the director of an eight-year (1953-60) prospective study of population dynamics in a large rural population in Ludhiana District (near Khanna) (Wyon and Gordon 1971), with a follow-up investigation ten years later.

The Research-Cum-Action Project On Environmental Sanitation

Hugh Leavell was associated with the Research-cum-Action (RCA) Project on Environmental Sanitation (1956-60), which covered large rural populations (Government of India 1957 : 182-89), (Programme Evaluation Organisation 1960). Here, research activities were focussed with a view to launch an ambitious action programme to popularise installation and use of sanitary latrines in the study areas.

This study was distinctive in many respects. This was a major study, involving a large number of scientists for a five-

year period. It was an interdisciplinary study, involving considerable interaction among social scientists, health administrators, health educators and public health engineers. It was also an action programme based on interdisciplinary research findings, with a built-in feedback system to ensure further strengthening of the action programme, through research on specifically identified problems. The RCA Project covered 95 villages near Delhi (Najafgarh), Calcutta (Singur) and Madras (Poonamallee) (Programme Evaluation Organization 1960). Each project had three sections, namely Health Engineering, Health Education and Social Science. The Government of India employed nine professionals and over thirty supportive field staff to work whole time for the three projects. In addition, there were a substantial number of Ford Foundation consultants.

The objectives of the RCA Projects were :

1. To develop improved design and the methods for the construction of sanitary rural latrines.
2. To develop effective educational methods for helping rural people to accept, use and maintain sanitary latrines.
3. To test and demonstrate the organizational set-up, whereby the improved designs and improved educational methods may be applied most effectively under prevailing rural conditions.
4. To assist in the utilization of the findings under the above three categories by interpreting them to those responsible for training and operational programmes and by providing field consultants to help in the process of application of these findings.

It is remarkable that a project of such complexity and magnitude should have been launched as early as in 1956. Here, the social science approach was qualitatively as well as quantitatively different from those of Marriot and of Carstairs. In this project, a sizeable group of social scientists from India and abroad were offered positions as equal members of interdisciplinary teams and they were given the wherewithal to make their contributions during the research, programme formulation and action-feedback phases. However, this process of relating contributions of social scientists to a well-designed action-evaluation frame also posed two types of challenges to

social science and social scientists: it was a challenge to develop the then existing body of knowledge of social sciences to respond to the social science issues involved in the action-evaluation process in a programme on environmental sanitation; it was also a challenge to the competence of the social scientists involved in that Project to (a) have the interdisciplinary capability to understand the entire process of 'research-cum action' envisaged in the Project and identify the areas where they could make the needed contributions and (b) have the conceptual and methodological base to mobilise the already existing knowledge available in this field and also to undertake research programmes to generate the critically needed inputs in the research-action-evaluation process. In effect, by agreeing to participate in the process of implementation of a large scale programme of environmental sanitation in rural India, the social scientists agreed to subject themselves and their disciplines to the searching test of relevance and validity.

With hindsight, it is not surprising to discover that the objectives of the project were not achieved and that the contributions of the social scientists fell far short of the expectation. The need for sanitary latrines did not emerge from the people themselves; it was imposed from above on the presumption that installation of latrines in village houses will have a major impact on the health status of the population, even though a large proportion of them lived in extreme poverty, with its associated manifestations of environmental degradation; it was also presumed that social scientists and health educators already had or would develop such motivational skills that, despite grossly unfavourable conditions of living, people will accept the latrines recommended to them by health workers.

The problems of conceptualisation, design, implementation and analysis and interpretation of the RCA project turned out to be so formidable that it had not been possible to present even a full report on it. The experience could only be partially reconstructed from a number of documents—mostly mimeographed—where there have been incidental references to or observations on aspects of the project. This has been done because this experience offers many important lessons in the use of social sciences in health service development—e.g. identification of social science problems and problems of

health service development in the context of the overall way of life a community and new challenges to social scientists to make their contributions in an interdisciplinary research project. In addition, there were three sets of important spinoff 'benefits' from the RCA project, which had far reaching consequences for the growth and development of social sciences in health fields in India.

One was the Conference held in 1956 (Government of India 1957), which brought together some of the most eminent social scientists and health administrators of the country. This Conference was called at the initiative of the organisers of the RCA project with the specific purpose of supporting and strengthening social science work in health fields. Hugh Leavell was the moving spirit behind the Conference. He had obtained in advance views of the participants on specific questions on the subject of discussion. The well-written report prepared by him also gives a most vivid account of the process of interaction between social scientists and health administrators. It contains a record of responses to specific problems from scholars like N.K. Bose, D.N. Majumdar, Irawati Karve, A. Aiyappan, P.C. Biswas, N. Prasad and the then up and coming scholars—M.S. Gore, M.N. Srinivas and S.C. Dube. This makes the report an important document for history of social sciences in India. Five of the nine health educators/social scientists from USA were already (1956) working with Indian agencies at Najafgarh, Poonamallee, Lucknow (Planning Action Research Institute) and Calcutta (All India Institute of Hygiene and Public Health) and at the Delhi School of Economics.

The social scientists were candid enough to confess that they had no answers to the problems posed by the health administrators. They also agreed that this was an important area of interest to social scientists. However, none of the them followed up their experience at the Conference with any contribution of note.

Interestingly, two of the most insightful observations came from those who did not claim to be social scientists. S. K. Dey, the father of India's community development movement, was quick to reject emphatically the then prevailing notion that 'village people were aborigines, orthodox, reactionary, quarrel-

some, superstitious, lethargic and the like' (p. 43); he also considered the enquiries at the Conference as an element in 'an expanding democratic process'. Another eminent health administrator, C. Mani, then the Regional Director for WHO for South-East Asia, observed : 'Is there something wrong with us or something is wrong with the villager?'

The Harvard Group got considerable support from agencies like the Rockefeller Foundation and the Ford Foundation and the US Government foreign aid agency for carrying out the RCA Project. The Government of India had also made substantial contributions. After its completion, many of the foreign consultants continued to work for these agencies to develop institutions for health education and social sciences in different parts of India. They succeeded in creating important work positions for social scientists and health educators in many government health institutions. The All-India Institute of Hygiene and Public Health at Calcutta was one such institution. The Ford Foundation had made available the services of Dr M. Field as a Visiting Professor of Health Education at AIIPH even before the start of the RCA Project (i. e. 1956) (Government of India 1957).

In addition, an entirely new institution with a strong group of social scientists—the Central Health Education Bureau—was established in Delhi in 1956 (Central Health Education Bureau 1982). In turn, the Central Health Education Bureau was instrumental in setting up health education bureaus on similar lines in most of the states. The government run rural health centres at Singur, Najafgarh and Poonamallee were strengthened with the creation of additional positions for health educators and social scientists. The Ford Foundation was also instrumental in considerably strengthening organisations in the non-governmental sector—one such example is the Rural Health Training and Research Centre at Gandhigram in Madurai District of Tamil Nadu (Gandhigram Institute of Rural Health and Family Planning 1979). Many Indian members of the staff of the RCA Project were absorbed in these institutions.

After the termination of the RCA Project, Hugh Leavell came back as a Ford Foundation Consultant to assist in the establishment of two national institutions—the National Institute of Health Administration and Education (NIHAE)

(National Institute of Health Administration and Education 1971) and the Central Family Planning Institute (CFPI) (National Institute of Family Planning 1975) as autonomous bodies fully funded by the Government of India. Along with Edward McGavran, who was formerly the Dean of the North Carolina School of Public Health, Hugh Leavell had become a member of the faculty of NIHAE and served the institution for over five years. Conforming to the pattern of the RCA Project, both these institutions had strong units of social sciences and health education and a number of foreign consultants had been made available by the Ford Foundation to develop them.

While in NIHAE, both Leavell and McGavran had played important parts in the designing and implementation of two major public health research projects—one under the sponsorship of the Indian Council of Medical Research (National Institute of Health Administration and Education 1971b) and the other under WHO and UNICEF (Timmapaya 1972). Both these projects had social scientists and public administrators as important members of the research team. These studies will be discussed in Chapter 7.

The Khanna Study

As mentioned above, the focus of the other major field study from Harvard (Khanna Study) (Wyon and Gordon, 1971), launched under the leadership of John Gordon was on family planning. Carl Taylor and John Wyon were the field directors during 1953-56. In the early phases it was not considered necessary to have social scientists in the staff as it was meant to be 'a scientifically controlled test of contraceptive programme as a means to lessen birth rate'. It was claimed that few other investigators had attempted to document demographic variations of a defined population in such detail over a prolonged period. A study, 'in a poorly educated, rural population of an underdeveloped country' was considered as unique at that time (Wyon and Gordon 1971 : xvi).

It is interesting that even within the limited frame of testing a contraception programme, it was realised that it would be necessary to consider 'persons as individuals and with formal and informal structure of social units' (p. 4). Taking a more

overt ethnocentric stance, the report of the Khanna Study had asserted 'westerners have strong feelings about the value of persons and of human life not necessarily shared by Punjabi villagers' (p. xviii). It was felt necessary at a later stage to seek the help social scientists to make a deeper analysis of such considerations. The papers published by the Project staff considered social science issues such as motivation for family planning (Wyon 1957), the reasons for people having so many babies (Wyon 1960), birth of a baby in Punjab (Gideon 1962) and social and cultural factors determining the pattern of medical care sought in fatal illnesses in rural Punjab (Singh et al. 1962).

As in the case of the RCA Project, no comprehensive report on the Khanna Study was published after the eight-year (1953-60) phase was completed. The follow-up study was done in 1969 and the comprehensive publication: *The Khanna Study: Population Study in the Rural Punjab* (Wyon and Gordon 1971), came out in 1971. Later on, another scholar from Harvard, Mehmood Mamdani (1972), raised a major controversy when he questioned the motives of the research scholars involved in the Khanna Study and came forward with an alternative explanation of reproductive behaviour of the same study population on the basis of his own sociological field work (see Chapter 6).

The Narangwal Studies

The Harvard School of Public Health had been associated with the Department of Preventive Medicine of the Christian Medical College at Ludhiana, since its very inception in 1953 (Wyon and Gordon 1971). Carl Taylor was the first to hold the chair of that Department. Indeed, it is this association that led to the choice of the villages for the Khanna Study. Carl Taylor had started a Rural Health Research Centre at the village Narangwal in 1955 (Wyon and Gordon 1971). While he was at Harvard, in 1959, at the suggestion of the then Minister of Health of Government of India, Taylor had agreed to organise a five-year collaborative research project (Rural Internship Study) with seven Indian medical colleges to 'learn more about the problems of preparing doctors for rural services and developing a rural orientation as a

part of the medical training, and about possible solution to such problems (Taylor et al. 1976:8). The US Government agreed to fund the project from the proceeds of sale of food-grains to India (PL-480) and it was located at Narangwal. Taylor moved to the newly organized Department of International Health at the Johns Hopkins School of Hygiene and Public Health in 1962 and the project became one of its major field activities. Thus started the third of the series of major public health projects in India under direction of eminent US scholars.

The Narangwal group of projects turned out to be the most expensive, most ambitious, most extensive and the longest lasting of the three. As the Rural Internship Study neared completion, three other research projects were developed concurrently at Narangwal—the Functional Analysis Research Project (Johns Hopkins University 1976), the Project on Interaction of Nutrition and Infection in Weaning Age Children (Keilman 1978) and the Study of Interactions of Family Planning Services, Maternal Care and Child Care in Increasing Family Planning Practice (Taylor et al. 1978). Along with these three basic research objectives, there was also a parallel flow of subsidiary applied research aims.

Involvement of social scientists in the Rural Internship Study was much more extensive and much deeper than even the RCA Project. A strong social science group was built up as a part of the project staff at Narangwal. In addition, the study group of each of the seven medical colleges chosen for the study had one social scientist. This strong social science input was retained in the projects which were taken up after the completion of this study.

The Narangwal projects were also distinctive in the sense that they covered the period of the nineteen sixties and the seventies, which saw many basic changes in family planning and health programmes, in manpower development and in the growth and development of institutions like the NIHAE and CFPI. Carl Taylor and his group also took much greater care to disseminate information concerning their research plans, programmes and findings through mimeographed documents, research papers and monographs and through participation of staff members in various meetings, seminars and other such

forums within the country and abroad. They can claim a special credit for organising what had come to be called Annual Conferences on Rural Internship at Narangwal in 1963, 1964, 1965 and 1966 (Taylor et al 1976:27). The original purpose was to involve the key functionaries of the seven collaborating medical colleges in the rapid implementation of the findings of the project. Much more important was the fact that starting from the then Union Minister of Health and Family Planning (Dr Sushila Nayar), key officials from her Ministry, the Medical Council of India, the Indian Council of Medical Research and international agencies such as WHO, USAID and many funding foundations had readily accepted Carl Taylor's invitation to stay at Narangwal village to participate in the growth and development of a US Government aided project (Taylor et al 1976:27). The project thus received active support from the highest levels of political and administrative leadership of the health services of the country.

The Rural Internship Study (Taylor et al 1976) required an interdisciplinary approach based on understanding of rural medicine and medical education and the process of professional socialisation. At the First Conference on Rural Internship, held at Narangwal in April 1962 (Taylor et al 1976:17-24), prominent Indian and international experts in social sciences, medical education and health administration devoted one full day and classified under six headings the seventy-nine (plus one added) variables suggested to them by the Project staff: (1) attitudes of interns; (2) attitudes of intern's family and reference group; (3) professional and career opportunities; (4) rural living conditions; (5) attitude towards villagers; and (6) instruction during internship. A 'Battery of Questionaries and Tests' was specifically constructed to obtain data on the variables. David McClelland, David Winter and George Litwin of the Department of Social Psychology at the Harvard University constructed a specific instrument—Rural Thematic Appreciation Test (RTAT) as an adaption of Thematic Appreciation Test (TAT) for the project. Questionaries on rural programmes and professional matters, a story completion test and a daily log constituted the other components of the Battery. Apart from the Christian Medical Colleges at Ludhiana and Vellore, a medical college each from Bombay, Delhi, Lucknow, Nagpur

and Trivandrum were included in this study. This study was reported in the monograph, *Doctors of Villages* (Taylor et al 1976). It is interesting that three of the six authors are social scientists. Earlier, an associated study obtained profiles of role expectations of health officials and educators most directly responsible for policy decisions relating to doctors of a primary Health Centre, was reported in another monograph, *the Health Centre Doctor of India* (Takulia et al. 1967). The principal author of this work (H. S. Takulia) was then the Chief Social Scientist at Narangwal. In another associated study, the seven social scientists, living in the village health centres of the seven medical colleges, studied local patterns of beliefs about selected diseases and diet in rural India.

The *Functional Analysis Research Project* (1965-70) (Johns Hopkins University 1976) evolved from the rural orientation study. It was realised that study of doctors alone served limited purpose and that analysis of the entire team of a health centre was important, as the gaps in providing care to people in villages could be filled only by auxiliaries. This project, therefore, concentrated on the analysis of the whole health centre complex. The major objective was to develop a methodology for relating health needs with resources. For this, a functional matrix based on thirteen selected functions was developed. As in the case of the Rural Internship Project, this Project too had a strong social science component. Development of methodology to study and measure community needs, attitudes and actions constituted one of the two components ; the other component related to health care delivery. In this case the challenge to social scientists was even more formidable : social scientists were required to formulate concepts to determine the implications of community needs, attitudes and actions in terms of the health problems and available and acceptable health resources. This not only involved drawing from the body of knowledge of social sciences that had been developed till then, but also forming new concepts which could enable social scientists to respond to issues emerging from the interaction of a community, its health problems and its health practices. Having developed the required conceptual frame, the next task was to formulate a suitable methodological approach. Information from secondary study villages, data on vital statistics,

development of village profiles and interview of village leaders, single visit household interviews and two-weekly interview of panel households, were the tools used for collecting the data required for this study.

It is obvious from an examination of the final report on the Functional Analysis Research Project that, despite their strong interest in social science aspects, the investigators have not been very successful in integrating the data on health centre activities with the social science data. This has been and continues to be a major problem in the use of social sciences in health fields.

The Narangwal Rural Health Research Centre continued to have a strong social science component in the other two major projects. The five-year (1968-73) *Study on the Interactions Between Malnutrition and Infection* (Kielman 1978) was designed to define the relative strength of interaction between malnutrition and infections and to work out 'health and nutrition service packages.' The project included four groups of villages which were provided one of the following : (1) nutrition care ; (2) medical care of infections ; (3) both nutrition and medical care ; and (4) control. The other project—*Study Interaction of Family Planning, Maternal Care and Child Care* (Taylor 1976)—was carried out with a view to increasing family planning practice, had five experimental cells : (1) family planning, maternal care and child care ; (2) family planning and maternal care ; (3) family planning and child care ; (4) (family planning only ; and (5) control.

D.N. Kakar, who had been a social scientist with the rural health centre of the medical college at Lucknow for the Rural Internship Study and at Narangwal during 1961-63, has published a number of papers based on his work with Carl Taylor for almost a decade. He later (1977) wrote a book, *Folk and Modern Medicine* (Kakar 1977) which has chapters on folk concepts of ecology of illness, food beliefs and nutrition education and socio-cultural aspects of malnutrition. The fact that very little of the work of Kakar or of other social scientist, who were involved in the two projects, could find mention in the subsequent Narangwal publications, shows that there has been further widening of the gap between the social scientists' role expectations and role performance in these two projects.

The enthusiasm for social science contributions in health fields in the RCA Project, the Khanna Study and the Narangwal Projects can be plotted in an interesting curve. The later fifties and the early sixties saw considerable interest in social science aspects of health ; it reached the peak by the mid-sixties ; in the later sixties and the early seventies the decline took place in a fairly symmetrical fashion—making it look like a normal distribution. In the rest of the country too, interest in social science followed a similar curve of rise and fall over the two decades.

Aspects of Sociology of Knowledge of Social Science in Health Fields

This very brief account of the health projects directed by some scholars from USA throws interesting light on aspects of sociology of health service development in India, including sociology of knowledge of social sciences in health fields :

1. The directors of the projects have been well established and highly respected scholars from some of the most prestigious schools of public health in USA—Harvard, Johns Hopkins and North Carolina.
2. They were well supported by influential funding agencies—first by agencies like the Rockefeller Foundation, the Ford Foundation, the Population Council of the US and the US National Institute of Health and later (when the 'ban' against government involvement in birth control promotion was lifted), directly by US Government agencies.
3. They were warmly welcomed by the political leadership, health administrators and public health scholars in India. The Government of India had made substantial financial contributions to these projects and extended various facilities to them.
4. These projects were launched when India was embarking on ambitious programmes for health service and manpower development and therefore the project directors had opportunities to have considerable influence on these programmes.
5. Throughout, a major concern was the rapid growth of population in India, which was thought to be cancelling efforts to raise low standards of health.

6. The project directors were enthusiastic supporters of interdisciplinary research in public health.

7. They had strongly encouraged active involvement of social scientists and health educators in interdisciplinary research work. A large number of social science consultants had been brought in from USA to help in the promotion of these new fields. This included such renowned scholars as Oscar Lewis, David McClelland and David Mandlebaum.

8. Scholars from USA had been pioneers in establishing preventive and social medicine departments with their field practice areas in medical colleges of the country. The object was to bring about a reorientation of medical education.

9. They commanded considerable prestige, patronage and power in India. They have been instrumental in building up a large body of Indian scholars, including social scientists and health educators, who, at least partly because of their association with the projects, could occupy key positions in many of the new government funded institutions for training and research in health and family planning.

10. Unwittingly or otherwise, they seemed to consider the flow of ideas to be mostly a one-way traffic : the Indian staff working in the projects were mostly involved in carrying out the ideas handed down to them by scholars from USA. The world view of the project directors, including their social, political and even religious predisposition, as well as their intellectual bias, have influenced the choice of Indian scholars in the projects. As a corollary, they have avoided, often quite actively, ideas which seemed to question their ideas, plans and programmes. They could also use their considerable influence over government agencies to discourage growth of any other school of thought in health service development. This was perhaps the most damaging consequence of the collaborative work.

11. With hindsight, it is apparent that despite all the advantages, these eminent scholars have not been able to make any significant contribution to the growth of knowledge through the projects conducted by them. The RCA Projects did not lead to insights into use of sanitary latrines in rural areas ; nor could the research-cum-action enrich the field of research methodology in public health practice. Also, no

significant social science insights came out of it. Similarly, the Khanna Study did not lead to new ideas to develop effective family planning programmes for the country. The four major studies carried out at Narangwal also did not have any significant impact in the fields of rural orientation of medical education, methodology of health services research and in nutrition and family planning and maternal and child care programmes.

12. Despite so many efforts to promote use of social sciences, it had not been able to lay solid foundations for their healthy growth and development.

13. An analysis of the entire experience shows how through such 'collaborative efforts' some of the most critical decisions concerning health service development of a newly independent country were influenced by scholars from abroad.

14. The experience has also shown that even some of the most eminent scholars from Western countries were found less than adequate in coming to grips with some of the most critical problems of health service development in the country.

15. The Indian scholars had been almost wholly dependent on their American counterparts in giving shape to the knowledge of social sciences used in the various projects.

16. The social science inputs in the projects provide vivid examples of what John Mckinlay (1984) has described as atheoretical, ahistorical and apolitical.

CHAPTER 6

Health Education and Family Planning

Health Education and Social Sciences

An analysis of sociology of knowledge of social sciences and of health education in India is helpful in understanding development of social sciences in the field of health education. It is significant that the most important thrust for the development of social sciences in health came from the rapid development programmes of health education. In the RCA Project, social scientists and health educators had been called in to make rural people use sanitary latrines. The value position of the project director is quite explicit: rural people ought to use sanitary latrines as it was considered good for them and the task of social scientists and health educators was to bring about changes in people in such a way that their actions conformed to the desire of the project director (Government of India 1957), (Programme Evaluation Organization 1960). As pointed out earlier, endorsing this approach, the Government of India initiated steps to establish a large number of institutions which offered important positions to social scientists and health educators. Many of these institutions had a number of consultants from foreign countries, mostly the USA, to help in the development of this discipline. Health education was assigned an important place in the policies, plans and programmes for developing health services of the country. All India Health Education Conferences were organised in 1956, 1960, 1964, 1965 and 1966 (Central Health Education Bureau 1959), (Central Health Education Bureau 1960), (Central Health Education Bureau 1964), (Central Health Education Bureau

1965), (Central Health Education Bureau 1966) to provide a forum for discussion among those engaged in health education work in the country. The reports on the last three of these well-attended conferences show that in each one of them the then Union Minister of Health and Family Planning (Dr Sushila Nayar) reiterated her firm commitment to strengthening health education work in the country. 'Health education is the foundation of all health services', declared Dr Sushila Nayar while presiding over a session on that subject at the Fifth Health Education Conference, held in 1966. Agencies like the Ford Foundation, US Agency for International Development (USAID) and World Health Organization also extended their full support (Central Health Education Bureau 1966).

Health education bureaus of the Union and state departments of health and other major centres of health education like the Rural Health Research Institute, Gandhigram, the All India Institute of Hygiene and Public Health and Rural Health Division of Planning and Action Institute, Lucknow (PRAI) drew up plans for setting up field units to cover large populations to demonstrate the importance of health education in public health practice. These demonstration units were also to be used as field training areas for their ambitious programmes for education, training and research. Diploma level education programme was started at the institutes in Calcutta, Delhi and Gandhigram (Central Health Education Bureau, 1982). CHEB also has a certificate level programme (Gupta 1982). Many of the institutes also organised special programmes for training in health education. Steps were also taken to initiate research work (Central Health Education Bureau, 1980).

Two major assumptions formed the social science base of the strategy for health education: that a person's behaviour is "rational"; and that a positive high correlation exists between knowledge and behaviour. Thus, health behaviour becomes a consequence of the process of knowledge, leading to attitude, leading to practice (known as KAP) (Dhillon 1968). The KAP premise implies that knowledge leads to attitude change, which leads to change in behaviour. Hence, the failure in the output indicator (behaviour) is interpreted as the failure of the input (education).

The KAP approach revived another premise which had

originally proved effective in the field of agriculture in USA—the premise of the adoption model. This model presupposes a sequential process starting with *awareness* of a method or a need, taking an *interest* in it, passing through a period *trial and evaluation* and, finally, *adoption*. This process does not foresee failure or discontinuation if all steps are carefully followed. H.S. Dhillon, who had worked as a social scientist with the RCA Project and who later occupied a key research position at the Central Health Education Bureau, New Delhi had made approving references (Central Health Education Bureau 1969) to the model of two-step communication developed by Katz (1952), the diffusion innovation model of Rogers (1958) and (1965) and health behaviour models developed by Rosenstock (1959) and by Hochbaum (1964).

It was realised subsequently (Brown and Margo 1978) that while the two assumptions that guide the KAP model are valid under certain conditions, neither stands the test universally. The great diversity of social organisations and cultural values resulting from the interplay of different human attributes, with the immense variety of circumstances which a person encounters, makes *a priori* judgements and stereotypes in health education futile (Brown and Margo 1978).

Although, depending on the complexity of the problem, there are some cause-and-effect relationship between knowledge, attitude and practice, the process is not always one-way, and visual aids are not necessarily as important as they were considered to be. Although, 'change of attitude' had become a common parlance, little consideration was given to that driving force in human beings that determines, shapes and reshapes their attitudes, that is, their values. Transplantation of the adoption model developed from the field of agriculture to delicate behaviour problems in health without consideration of all other intervening forces has resulted in failure (Brown and Margo 1978).

In the early seventies it became apparent that the usefulness of research from many social scientists and health educators was much less than what was expected of them (Banerji 1973a). Despite considerable support and encouragement, there was virtually no research study which had any significant impact on the practice of health education in the

country. For instance, it was decided at the Fifth Health Education Conference (Central Health Education Bureau 1966) that each state would take up atleast one district (pop. 1.5 m) each year to initiate and carry out the 'mass movement for health education' (Central Health Education Bureau 1966). This did not take place. In fact, the Central Health Education Bureau could not demonstrate the effectivesness of the health education practice advocated by them even in a population of 100,000 (in Patuadi Block of Gurgaon district, which was taken by them as the field practice area) (Gupta et al 1968). Many of the state health education bureaus have ceased to function. Many important posts have been abolished.

As pointed out by Brown and Margo (1978), by focussing on behaviour itself, health educators did not deal with the social relations and structures that may underlie and contribute to the behaviour pattern they find objectionable and diseases they wish to prevent. They often relied on techniques that manipulated behaviour rather than facilitated individuals' and groups' abilities to influence and control their physical, social and economic environment. Such programmes often amounted to blaming the victim for his problems. This approach of health education which diverts people's energy from changing social context of behaviour to changing individual behaviour had been deeply regretted by Dorothy Nyswander, who was one of the founders of the health education profession, and who was also involved in laying the foundation of the health education profession in India as a Ford Foundation Consultant. Looking back at her work at the end of her career, she observed, 'My efforts were expanded in working out the symptoms of closed societies, the basic conditions giving rise to the symptoms were untouched... Have I actually helped to maintain the status quo in these situations? Have I not taught people to accept those gifts approved by the establishment which would make life more bearable but which would not threaten the power of the establishment itself?' (Nyswander 1967). Ironically, in the same year when this was published, some of the most favoured deciples of Nyswander had been exhorting the faithful in the Fifth Health Education Conference at Bangalore to launch a 'National movement to educate people to accept the small family norm which is the key to all progress' (Sushila

Nayar). In a way it can be considered fortuitous that the social scientists and mass communication experts, from within the country and abroad, who had been engaged in the obviously unethical activities of 'motivational manipulation' of the people turned out to be so inapt and unimaginative; they would have inflicted much greater damage to people had they been more creative and imaginative in their work.

The WHO Expert Committee on New Approaches to Health Education for Primary Health Care (World Health Organization 1983) has strongly endorsed the views of scholars like Brown and Margo (1978), Nyswander (1967) and Moarefi (World Health Organization 1978b), describing the conventional approach as paternalistic and commandment-like, patronising and victim blaming. The alternative objective suggested by it is 'to foster activities that encourage people to *want* to be healthy, to *know* how to be stay healthy, to *do* what they can individually and collectively to maintain health, and to seek help when needed'.

Articulating the current thinking in health education in his inaugural address at the Eleventh International Conference on Health Education in Hobart in 1982, the Director General of the World Health Organization observed (Mahler 1982): 'I sincerely hope this Conference will write an obituary to that type of health education which is concerned with *telling* people how to act and that instead it will emphasize taking due consideration of the social forces that bring them to act as they do'.

Family Planning

'Motivational manipulation' has been a common thread that has linked the use of social sciences with the practice of health education and family planning. The object, as pointed out by the Dorothy Nyswander (1967), has been to help maintain the political *status quo*. The political leadership in India actively sought and obtained generous 'assistance' from abroad to protect the existing social relations. As pointed out earlier, as early as in 1949, there was considerable concern at the rapid growth of population in India at the Harvard School of Public Health. The Khanna Study (Wyon and Gordon 1971) was launched in 1953 to promote family planning. There

01931

HP-100

COMMUNITY HEALTH CELL

326, V Main, 1 Block

Koramangala

Bangalore-560034

was also concern at the United Nations. India was the first country in the world to have a state sponsored family planning programme. Family planning has received the overriding priority in national planning (Banerji 1985a : 175). There was a rapid increase in allocation of funds.

In the fifties, following the ideas from the International Planned Parenthood Federation, the Union and state governments set up a large number of family planning clinics, first in urban areas and then spreading out in villages (Chandrasekharan and Kuder 1965), (Banerji 1971b).

When it became obvious that the outreach of the clinics was limited (Chandrasekharan and Kuder 1965), inspired by the experience in the field of agriculture in USA, foreign consultants (mainly from the Ford Foundation) succeeded in persuading the Indian leadership to shift to an extension approach to family planning (Banerji 1971: 17), (Raina 1963). A large number of extension staff was added to the programme in 1963. An extension educator (the Block Extension Educator) was made available for each of the 5300 Blocks. Similarly, extension staff was strengthened at the district, state and central levels. Steps were also taken to considerably strengthen the staff to work at the village level. A major programme for mass communication to promote family planning was launched about this time (Kakar 1979).

The decision to make rapid expansion of extension staff in the family planning programme came at a time when there has already been considerable progress in developing institutions for education, training, research and practice in health education in the country. The pressure for implementing the extension approach to family planning was so strong that almost the entire organization for health education in the country was 'requisitioned' for family planning work. In addition, it was also considerably expanded and strengthened. Similarly, social scientists were mobilised on a large scale to support family planning. Thus, the three small streams (i.e. population control, social sciences and health education) which had their origin at the Harvard School of Public Health in the early fifties (Wyon and Gordon 1971), had, over the two decades, gained considerably in strength and had their final confluence

in the family planning programme to make it a massive effort to control population growth in the country.

As pointed out earlier, the Ford Foundation assisted the Government of India to establish two apical institutions to provide training and research to the family planning programme—the Central Family Planning Institute (CFPI) and the National Institute of Health Administration and Education (NIHAE). Regional Family Planning Training Centres were established by the Government of India—one to cover a population of ten million—to provide training to the extension staff of the rural family planning centres (Banerji 1971 : 21-22). Central family planning training institutes at Delhi, Calcutta, Gandhigram, Nagpur and Bombay provided : (a) training of trainers of Regional Family Planning Training Centres and senior extension staff and (b) research support to the programme. The disciplines of social sciences and health education were strongly represented in the faculty of all these institutions. The leaders of extension education in India and their foreign advisers were so confident of the effectiveness of the ideas of Rogers, Katz, Rosenstock and Hockbaum that in the Fifth Health Education Conference they called for application of the method of 'motivational manipulation' of the people of India to build up a mass movement for promoting a small family norm (Central Health Education Bureau 1965).

Apart from inputs in research and training in social science in these institutions, resources had also been made available to develop special units to serve this purpose. As early as in 1953, a Family Planning Research and Programme Committee was set up (Rao 1974 : 12). A Demographic Advisory Committee was set up in 1959. In 1960, following the experience with the RCA Projects, a Family Planning Communication Motivation Action Research Committee (FPCMARC) was formed. In turn, apparently following the advice of foreign consultants, the FPCMARC set up Demographic and Communication Action Research Centres (DCARC) in different parts of the country between 1962 and 1965.

Involvement of foreign consultants in the family planning reached its peak in the mid-sixties (Demrath 1976), (Rosen 1985). These consultants have been extensively involved in all

the phases of the programme—policy formulation, planning, implementation, evaluation, education, training and research. A professor of sociology of the Washington University at St. Louis, Nicholes J. Demerath, Sr., who himself served in the faculty of NIHAE as Ford Foundation Consultant, has given a vivid and a detailed account of involvement of a number key US institutions in influencing family planning programmes in India and many other countries of the Third World (Demerath 1976). Focussing his attention on the role of the Ford Foundation in India and Pakistan in 1950-1970, George Rosen (1985) has given a more detailed and documented account of the way this organization had become an "instrument of United States foreign policy, working closely with the State Department, with ex-CIA officials in leading positions in some of its assisted projects, and oriented towards containment of 'expansionist communism'" (Tyabji 1986). Rosen observes that Pakistan's 'Harvard Advisory Group' was even more influential than Ford Foundation had been in India.

Some of the major decisions taken subsequent to the adoption of the extension approach to family planning are of interest for understanding the role of social scientists and health educators. When the Ford Foundation agreed to make available large quantities of Lippe's Intrauterine Uterine Device (IUD), the Government of India undertook to take suitable administrative action to use the device on a large scale (Government of India 1966). The United Nations Advisory Mission (1966) strongly supported this decision to make extensive use of IUD. After field trials, in 1967 a massive communication drive was launched and over a million of women were brought into various 'IUD Camps' for insertion of the device. However, very soon this programme received a severe set-back, because there were many complications and the follow up services for those who accepted were very inadequate, if not totally absent (Banerji 1971b : 14). Even though there were many social scientists and health educators working at various family planning institutions, they made virtually no effort even to identify the fairly obvious and operationally critical issue of possible social and cultural implications of the complications at the planning, formulation or implementation stages of the IUD programme (Banerji 1971b : 54).

When it was realised that 'motivational manipulation' of the people through extension education and mass communication was not yielding the desired results, pressure was exerted on the people to accept family planning by assigning 'family planning targets' to extension workers and by offering monetary incentives to surgeons, motivators and acceptors (Banerji 1971b : 55). Escalation of pressure on the people to accept family planning reached the peak during the period of National Emergency (May 1975-January 1977), when over nine million males were sterilised (Banerji 1980a). That was the time when the people struck back on their tormentors and this led to a massive electoral defeat of the Union Government. Since 1977, the successive governments have proclaimed repeatedly that they would never use coercion or force of any kind to get people accept family planning (Banerji 1980). It is significant there was little response from social scientists to these dramatic events.

In a review of social science studies in family planning in India, Kamala Gopal Rao (1974) found reports of 535 studies during 1951-73. Even a very broad analysis provided significant information. Many of these reports are unpublished. Fifty-five per cent covered only urban populations; 30 per cent were rural; and, 14 per cent were both rural and urban. Forty-five per cent of these studies were carried out during 1966-70. KAP studies accounted for 20 per cent; studies associated with use of different types of contraceptives, 45 per cent; fertility studies, 14 per cent; and training education and communication, 12 per cent.

Qualitatively, in most of the studies even elementary care in selection of sample was lacking —Rao observed that they were mostly 'ad hoc or convenient samples' (Rao 1974 : 38-39). The size of the sample varied from as few as seven persons to entire villages or communities. In terms of research techniques, vast majority of the studies have used questionnaires or interview schedules. There have been major shortcomings in the reliability and validity of the tools and in the process of data collection. Most of the studies are in the form of exploratory or descriptive surveys. Rao observed that many studies lacked continuity between conceptualisation, measurement and analysis.

It is significant that out of the 535 studies reviewed by her, the author could single out only three instances of methodologically well designed studies. These were, the Mysore Population Study (United Nations and GOI 1961), the All-India Contraceptive Practice Survey by the Operations Research Group, Baroda (Operations Research Group 1972) and the Haryana and Tamil Nadu Fertility Survey by the Population Council of India (Mukherjee 1973). The Mysore Population Study, reported in 1961, should have served as a model for more detailed analysis of the population and the programme, using an interdisciplinary approach. However, this did not happen and in most cases the focus remained on small scale, poorly designed KAP studies or contraceptive practice studies.

In earlier reviews of social science studies, Dhillon and Kar (1963), K.C. Krishnamurthy (1968), Pareek and his colleagues (1972) and Trakroo and Kapoor (1981) also came to similar conclusions. J.M. Stycos (1962) has aptly summed up the quality of the studies as 'spotty, uncoordinated and non-cumulative' (pp. 499-500).

This poor quality of response of social scientists to India's population problem and the family planning programme reflects the poor state of concepts, methods and knowledge of social sciences in India, because attention was not paid to developing local capabilities as much as 'using' social science or keeping a dependent relationship. It also shows that many eminent social scientists from abroad, who came to India as consultants to support the family planning programme were also not successful in developing a research perspective which is suited to the specific situation prevailing here. In fact, some of them have harmed the growth and development of social sciences by insisting on imposing on Indian scholars the Western models of diffusion or adoption, communication action research or KAP studies. Some others have indirectly played a negative role by lending their support to poor quality social science researches conducted by Indian scholars.

This aspect of sociology of the knowledge is important. An influential section of scholars and administrators seemed to have developed a vested interest in perpetuating a particular type of research (Banerji 1985a : 226). The field of social research has indeed been only the tip of the iceberg. Fixation

with only one type of approach, with a deliberate effort to play down those who dared to develop alternative ideas, had been a hallmark of the studies of the family planning programme in India (Banerji 1980a). The policy of imposing programmes from above, motivational manipulation of people to make them accept contraception, emphasis on mass communication, imposition of targets on family planning workers, use of monetary incentives and various forms of coercions, over-estimation of importance of bio-medical research, are some other instances. The history of this phenomenon can be traced almost to the time India gained independence, when some scholars at the Harvard School of Public Health, at the United Nations and elsewhere had expressed concern about the rate of population growth. This history is rooted in the class character of the Indian leadership and the economic and political forces in the 'developed' countries, which had been shaping their relationship with the 'underdeveloped' countries (Gunnarsson 1980), (Banerji 1980a), (Hofsten 1980).

Following repeated setbacks to the family planning programme, there have been increasing interest in developing new social perspectives for family planning. Writing after the disastrous results of forcible sterilisation drive of 1975-76, M.N. Srinivas and E.A. Ramaswamy (1977) have pointed out that because of their preoccupation with controlling population, policy planners have ignored the relationship of fertility to other aspects of culture. They have observed that in the family planning programme, 'action has preceded understanding'. They have highlighted the need for sociological research which points out the complexity of the problem of human fertility. They have pleaded for understanding of the religious, political and other dimensions of human fertility and population control and its dynamics.

However, even at this late stage, a social scientist of world eminence, David Mandelbaum (1974), fell far short of developing an understanding of human fertility in India on the lines suggested by Srinivas and Ramaswamy. In fact, this has once again revealed major shortcomings in the concepts, methods and data base used by most of the social scientists in the US to understand social and cultural processes in India. Mandelbaum has not been able to analyse the actual process of generation

of motivation for fertility behaviour and this has led him to recommend somewhat prosaic and unimaginative action programmes for fertility control in India. He asks for 'more monetary incentives, more extensive use of canvassers and of private practitioners and business organizations'. Apparently going back to the old anthropological traditions, he thinks that *dais*, *vaids*, *hakims*, and other medicinemen hold the key to success of control of fertility in India. Pointedly, he does not attach importance to such issues as power structure, poverty, disparities and educational and administrative culture.

Ramakrishna Mukherjee (1972) made his contribution by taking into account the data on values governing size of a family. He concludes that 'the family planning movement, in action and propaganda, should proceed from the *null* point that the Indian people, in general, desire at least 2 sons and, in this process obtain 1 or 2 daughters.' According to him, the family planning movement may be well rewarded by undertaking intensive and intricate diagnostic and causal studies on these lines.

A move away from the conventional family planning research was made in 1971 in the form of an extensive systems analysis of family planning in five districts of rural Uttar Pradesh (Mishra et al. 1982). This was a collaborative effort between the University of Michigan and the US supported Indian Institute of Technology, Kanpur. Due to various reasons, the findings could be published only in 1982. There were three major elements of this approach : (a) the conceptualisation of the essential interrelatedness of factors pertaining to the rural population, the implementation agencies and the wider environment within which they exist ; (b) exploration of a broad range of organisational issues ; and (c) the examination of both systems and organisation issues within an empirical framework. The general guidelines concerning taking account of organisational feasibility in policy making that emerge from the study are : (a) the strategy for client transactions that is chosen must be suited to the client population ; (b) the organisational strategy must be suited to the strategy ; and (c) the organisational strategy must be suited to the institutional and political context within which it is implemented. This could be considered as a landmark in

social science research in family planning because here social issues are understood, analysed and interpreted within an overall system of the family planning programme, involving complex interaction of a large number of factors. It was also a well-designed study.

The Family Planning Foundation of India has played an important role in initiating this new phase in social research (Family Planning Foundation 1983). It was established in 1970 with the assistance of grants from some of the top industrial houses in the country and the Ford Foundation. Apart from supporting studies of Kamala Gopal Rao, Srinivas and Ramaswamy and Mishra and his colleagues, referred to above, it has also sponsored a major study of aspects of quality and control of India's population by Asok Mitra (1978). Policy studies by V.A. Pai Pannandikar and his colleagues (1978) at the Centre for Policy Research, family planning communication studies by Sumanta Banerjee (1979) and R.L. Bhandari (1979) and an urban family and family planning study by A.R. Desai (1979) have also been sponsored by the Family Planning Foundation. These publications are among the 66 completed or closed research projects supported by the Foundation till 1983.

One of the largest schemes for research in family planning was the five-year India Population Project I (IPP-I) (India Population Project 1973), launched in 1973. The cost (US \$29 million) was shared by the World Bank, the Swedish International Development Authority (SIDA) and the Government of India. The object was to test the various programme inputs and evolve ways and means for attaining better performance from them. The IPP-I covered six districts in Uttar Pradesh and five in Karnataka (covering a total population of about 16 million). The project had four wings: population centre, project implementation unit, construction unit and coordination unit. Demand for family planning services was sought to be created through expansion of information, education and communication activities and through closer involvement of the community and opinion leaders.

Apart from basic flaws in the conceptualisation of the problem and in development of the research design, (Bergstrom 1982), (Bose 1985), (India Population Project 1978), IPP-I

encountered basic problems in its implementation. The net result has been that thus far (1986) scholars from outside the government cannot even get detailed report of this very expensive project. Notwithstanding this, IPP-I has been followed, with the full backing of the World Bank, by what has been called IPP-II in the states of Andhra Pradesh and Uttar Pradesh. This approach has been extended under the name of Area Projects and it now covers 63 districts in fourteen states, with an allocation of Rs. 2500 million. These, once again, were found to suffer from most crippling infirmities (Bose 1985), (Bose 1986).

CHAPTER 7

Other Areas of Application

Health Behaviour of Rural Populations

The case studies of Marriot and of Carstairs, referred to earlier, had been culled out of two larger studies (Marriot 1955a), (Carstairs 1957) of these authors. Khwaja Arif Hasan (1967) has been among the first scholars (1959-60) to have carried out field work specifically to elaborate on cultural dimensions of health in an Indian village. Interestingly, as in the case of Benjamin Paul's book (Paul 1955), Hasan's book, published only in 1967, also begins with an enthusiastic Foreword from Hugh Leavell, then serving as a Ford Foundation Consultant in NIHAE. Leavell had hoped that 'Dr Hasan will extend his studies and that others will be stimulated to follow his example' (Hasan 1963 : 2). That neither of these hopes materialised in the next twenty years, despite considerable expansion of the scope of social science work in health fields, is an indicator of the work output of the social scientists.

The village selected by Hasan is atypical in many ways—it is near Lucknow city, it is a part of the field practice area of the Department of Preventive and Social Medicine of K.G. Medical College, Lucknow and the study population had a disproportionately high representation from the Muslims and lower castes. The author stayed in the village for full one year and conducted participant observation, besides analysing available records and administering a voluminous questionnaire to a purposive sample of 80 out of a total of 215 households. In the report he describes the village environment, sanitary habits, personal hygiene, food habits and taboos, drinks and drugs, concepts of etiology and illness and doctor-patient

relationship. He has pointed out the factors that directly affect the health of a community because of certain customs and practices, beliefs, values and religious taboos and those that indirectly affect the health of the community. Some of the cultural factors play a positive role while others have negative influence on the health of the village community.

C.M.E. Mathews (1979) had also carried out a health focussed village study in North Arcot district of Tamil Nadu. She is a British missionary from the Church Mission Society, London. She spent over two years (1970-72) in the village, 'living like the people as far as possible, taking part in their lives interviewing and observing them' (p.3). The main emphasis is on villagers' own beliefs in causes and treatment of different diseases, different types of healers, maternal and child health and family planning. She has emphasised the importance of understanding beliefs of people and so close the communication gap between a doctor and a patient. She has also drawn attention to the important effect of poverty on health.

Other scholars like Gould (1967), Khare (1963) and Morris Opler (1962) have also reported on health behaviour of rural populations on the basis of their village studies.

Health Service Development

Social scientists have also been involved as members of interdisciplinary teams to study aspects of health service development in two major studies undertaken by NIHAE. Health administration and public administration were the other disciplines represented in the team. Hugh Leavell and Edward McGavaran were enthusiastic members of both these teams. One of these was a study of integration of health services at various levels of the organisation and degree of acceptance of the concept of integration by the people (National Institute of Health Administration and Education 1971b). This study was funded by the Indian Council of Medical Research. The other study involved an analysis of working of a district health organisation with a view to determining ways of improving its working (Timmapoya 1972). This was financed by WHO and UNICEF. A diagnostic study (1970-71) was conducted in the first stage, which was followed by the 'manipulative' stage

(1972-73) to improve the functioning of the health service system. In this case the contributions of the social scientists were confined to formulation of training strategies and improving the management.

In 1978, the National Institute of Health and Family Welfare (NIHFW), which was formed in 1971 with the merger of the NIHAЕ with the National Institute of Family Planning (earlier called Central Family Planning Institute), was entrusted with the task of evaluation of the Community Health Volunteers Scheme (CHV Scheme), which was meant to entrust 'peoples' health in peoples' hands' (Government of India 1977). NIHFW launched a collaborative study which involved All India Institute of Hygiene and Public Health, Calcutta, Indian Institute of Management, Ahmedabad, Operations Research Group, Baroda, National Institute of Nutrition, Hyderabad, Institute for Research in Medical Statistics, New Delhi and the Population Centre of the India Population Project at Lucknow (National Institute of Health and Family Welfare 1978), (National Institute of Health and Family Welfare 1979), (National Institute of Health and Family Welfare 1984). This was, thus, a major social science study. Both case and survey methods were used. The survey included a stratified random sample of 156 Primary Health Centres (PHC) out of a total of 1699 PHCs, where the Scheme was in operation in 1979. A set of thirteen instruments were developed and administered to : (a) community health workers/volunteers/guides ; (b) community members ; (c) community leaders ; (d) peripheral health workers ; (e) staff of the PHCs ; and (f) state and district level officials concerned with implementation of the Scheme. It was concluded that the CHV Scheme had received massive support from the community. The selection process of CHVs and also the range, quality and quantity of services provided by the CHVs was found satisfactory. There was a large measure of support for continuation of the Scheme. To strengthen it still further, it was recommended that action may be taken to design systems to manage inputs, develop adequate strategy to bring about community participation and develop adequate linkages between the CHV and the rest of the health services on one hand and the consumers of the services on the other.

However, subsequently, when the Union Government proposed that the respective state governments share with it the cost of running the scheme, neither the state governments nor the community came forward to shoulder the burden (Bose and Desai 1983). This indicates that there have been some weakness in the data which had led the NIHFW investigators to come to such optimistic assessment of the CHV Scheme.

Besides, another extensive evaluation of the Scheme carried out by Bose and his colleagues (Bose and Desai 1983) did not confirm many of the findings of the collaborative study and Bose and his colleagues had also presented data on aspects of the Scheme to point out many omissions in the design of the NIHFW study.

Hospital Administration

Social scientists and hospital administrators in NIHAE had launched an ambitious study of patient satisfaction and ward social system in two Delhi hospitals (Timmapaya 1971). Taking account the wider social system, organisation and bureaucracy, hospital ideologies, organisational structure of the hospital, hospital social system, ward system, patient attitude, communication, patient satisfaction, job satisfaction and sociology of hospital administration, they carried out an exploratory study, the results of which were utilised for preparing a hypothetical model concerning hospital performance. Based on the model, they developed a battery of instruments, including one on semantic differential for measuring hospital image. Expectedly, using so many tools for data collection, they obtained a large volume of information. However, at the end of their report, the authors themselves point out gross limitations—small sample, atypical hospitals which were studied only in parts, confining the study only to discharged patients, total exclusion of the out-patients, and so on. The report could not be published and is available only in mimeographed form.

Another study of patient satisfaction was carried out in a much smaller scale in a part of another hospital, based on opinion of patients (Ray 1974). There have also been many smaller studies reported in the literature (Kuppuswami

1975), (Trakru et al 1977), (Ramaiah et al 1971), (Timmapaya et al 1974). Almost all of them were conspicuous for gross disregard for some of the most elementary norms for research methodology, like sampling, choice of tools and their validity and reliability, inadequate sensitivity towards sampling and non-sampling errors, etc.

Communicable Disease Control/Eradication

Specialised 'vertical' programmes for control of communicable diseases have been the dominant feature of the rural health services ever since India gained independence. It is thus logical that when social scientists were offered positions in health institutions, they were encouraged to make contributions to develop these programmes. Involvement of social scientists in these programmes unwittingly exposed their limitations. Their contribution to the malaria control and eradication programme was limited to some work in remote tribal regions to persuade people not to whitewash their houses after they were sprayed with DDT (Dhillon and Kar 1965), (Dhillon 1969).

In responding to the National Smallpox Eradication Programme, they, and especially the foreign consultants, seemed to be particularly exercised over the role of Sitala Mata (Government of India 1957), (Basu 1979), (Gupta et al 1965), (Prasad 1959). There have been extensive writings on the rituals surrounding this goddess in different parts of the country. This excessive preoccupation with Sitala Mata obscured some other important issues : e.g. Sitala Mata aspect is more critical when a victim catches the disease and that quite apart from this, in a harvesting season, the mother has often to contend with the prospect of losing wages for a number of days when a child gets primary vaccination (Banerji 1985a : 134). Finally, had the Sitala Mata cult been as strong as had been made out by some social scientists, how could India have succeeded in eradicating smallpox ? In fact, the global eradication drive revealed that more than Sitala Mata, it was administrative inefficiency which was responsible for failure of smallpox eradication drive in India on the earlier two occasions (Basu 1979). Social scientists did not realise that they were used

by health administrators to promote the 'Sitala Mata' factor out of all proportions to provide a cover for the administrative shortcomings.

In the Leprosy Control Programme also social scientists were found to be pathologically obsessed with the question of stigma (Mutatkar 1984). A later study revealed that the stigma is associated mostly with the deformities, which manifest many years after the appearance of the first symptoms and snigs (Rao 1982). They also ignored the fact that the question of stigma is not simply confined to the allegedly ignorant victims. It has now been shown that health administrators in India (unlike Gandhi) had deep seated stigma against the programmes and also that those who work in the programme are themselves stigmatised ('victim blaming'). A similarly superficial approach has governed social scientists' analysis of the problems of case finding and case holding.

Tuberculosis was another area which attracted social science studies. Considering consequences, formation of a social stigma against the disease and the rapid advances in epidemiological, diagnostic, therapeutic and preventive aspects, the problem of tuberculosis offers a wide range of issues as a public health problem that should interest social scientists. Indeed, in India social science studies of tuberculosis have laid the foundation for an alternate approach to the use of these disciplines in health fields (Banerji 1980b). This will be discussed in Chapter 10.

From a conventional social science angle, predictably, the response was to follow the Western model. Dhillon had approvingly advocated the use of Rosenstock's model for studies (Dhillon 1968), pointedly ignoring the alternative approach (Banerji 1971a) which had already become well-established by then. Other social scientists were content with carrying out small and not always well-designed studies in such well-trodden areas as social stigma against the disease, knowledge about etiology and defaulting in case finding and treatment (Prasad et al 1960), (Tewari 1969).

It was left to two epidemiologists, B. K. Sikand and Raj Narain (1957), to open up wider horizons of social research. By making use of the data pertaining to Delhi City in the National Sample Survey carried out in 1956-58 (India Council

of Medical Research 1959), they pointed out that even in that city as many as 60 per cent of infectious tuberculosis cases had been unknown to the city's tuberculosis clinics.

Almost at the same time a similar problem oriented approach was followed by an interdisciplinary team of investigators at the Tuberculosis Chemotherapy Centre at Madras (Tuberculosis Research Centre. Madras 1959), while they were conducting the classical clinical trial of comparing home treatment and sanatorium treatment of tuberculosis cases. They had conducted 'social studies' to make an analysis of 'home series' and 'sanatorium series' of patients in terms of impact of the disease on family life, income, occupation and economic status. The two series have also been compared in terms of diet, rest and activity and accommodation. These data were useful in having a better understanding of implications of home and sanatorium treatment of tuberculosis cases.

In an anthropological and sociological analysis of treatment failure in the implementation of India's National Tuberculosis Programme (NTP) in parts of Valsad District of Gujarat, Mankodi and Van der Veen (1985) had adopted a new approach when they sought to examine certain problems that are internal to the programme, which are located in the interface between health institutions and the public. They have attempted to find out who avail of the facilities offered by the NTP and who do not, and who seek proper treatment through the NTP and who do not and why? The first phase of the study consisted of an indepth study of 32 tuberculosis patients in a village with a population of 5600 (Van der Veen 1979). This formed the basis of the second phase, involving 12 villages with a population of 60,000 which had 959 tuberculosis patients registered at the District Tuberculosis Centre of the NTP at Valsad town. The main conclusion of this study was that private sector interferes with the state organised tuberculosis care in a most unfortunate manner.

Van der Veen (1979) has also prepared a separate report on the indepth anthropological investigation as a case study. Within the much broader framework of medical anthropology, a report on Western medical care in Valsad by Van der Veen and some observations on caste, poverty and disease in an Indian town by Loes Schenk (1979), have formed

a part of a book *In Search of Health: Essays in Medical Anthropology* edited by Sjaak Van dea Geest and Klass W. Van der Veen (1979). The approaches adopted by Van der Veen and by Schenk (1979) contrasts sharply with those of Marriot and Carstairs. This book also shows the progress in this field since Benjamin Paul (1955) edited his book.

Management Science Inputs in Health Services

Interest in inputs from management sciences for health service development can, once again, be traced to the 'Harvard Group' and its association with Ford Foundation. Once again, Hugh Leavell had taken the initiative in including inputs from health administration and business management in the education, training and research activities of NIHAE. Substantial sessions on group dynamics and organisational behaviour had become a regular feature for training of health administrators in that institute (National Institute of Health Administration 1968). The launching of the India Population Project-I (IPP-I) (India Population Project 1973) gave a further boost to promotion of management sciences in health administration. Two key management institutes of the country, the Indian Institute of Management, Ahmedabad and the Administrative Staff College, Hyderabad, were assigned the critical responsibility of strengthening the projects in Uttar Pradesh and Karnataka, respectively. This was continued in IPP-II (India Population Project 1978). Other management institutions like the Indian Institutes of Management at Calcutta and Bangalore (Vyasulu 1976) and the Indian Institute of Public Administration (1968) have also major involvements in health fields. The School of Business Management of Delhi University has long been running masters and doctoral level courses in hospital and health administration (University of Delhi 1985).

A review of association of IIM-Ahmedabad with IPP-I and IPP-II by Rishikesh Maru and his colleagues (1983) revealed that there have been major problems which had seriously hampered the efforts of the IIM-Ahmedabad to introduce improved management practices in health services in Uttar Pradesh.

Medical Education and Medical Professions

Although there has been a very rapid expansion of both undergraduate and post-graduate medical education in the country, there has been no study of any significance in this important field. Neither has there been research to match the size of the medical education study carried out at Narangwal (Taylor et al 1976). Prabha Ramalingaswami has carried out a number of smaller studies on students' preference for specialities, leadership style and motivation, medical students' image of preventive and social medicine and medical students' perception of such areas as primary health care, poverty and women's health issues (Ramalingaswami 1980), (Ramaliagawami et al 1972a), (Ramalingaswami et al 1972b), (Ramalingaswami et al 1972c), (Ramalingaswami 1973).

In 1973, T. N. Madan of the Institute of Economic Growth of Delhi University had undertaken to study the profession of medicine (Madan 1980) as a part of an UNESCO-sponsored cooperative study of modern occupations and professions in Asia. Madan has been among the first few scholars from a University who had shown interest in medical sociology (Madan 1969), (Madan 1977). He has also been a member of the Regional Advisory Committee on Medical Research of the South East Asia Region of WHO. In the study of the profession, it was proposed to undertake a case study of an apex institution of teaching, research and service for each country. The All India Institute of Medical Sciences in New Delhi was chosen for the Indian component of the study. The primary data on the social background were obtained 'through questionnaires administered to a hundred doctors and medical scientists on the faculty of the Institute'. In addition, data of more qualitative nature of how the doctors conceptualise their role within their institutions in the context of the society were collected through personal interviews with 50 persons, 45 of them from the Institute. Madan concludes that while the doctors in the institute perform modern roles, it is doubtful that they perform an extra-professional modernising role in society. They tend to be a rather role specific speciality group. Earlier, Madan (1969) and (1977) had also carried out a number of studies on private practitioners.

Making use of students of M. A. classes of 1966-70 of Delhi School of Social Work, who volunteered to conduct their dissertation work to study occupational structures of doctors and nurses in a public hospital in Delhi, T. K. Oomen (1978) has attempted to move towards a theory. He tends to differentiate between fullfledged professionals and semi-professionals. Apart from the obvious limitation of depending on students for data collection, Oomen himself points out the severe limitations of the sample adopted by him.

In contrast, more recently, Nayantara Mishra (1984) has carried out an interesting study of the process of socialisation of nurses in a school of nursing using a well defined conceptual framework and a correspondingly sound methodological approach. Her interest was to study the process of transformation of a newly admitted student in the School of Nursing attached to the Safdarjung Hospital in Delhi into an efficient, self-confident nurse, who plays such a crucial role in the running of a hospital. Using qualitative and quantitative data, she drew up a personality profile of the new entrants. She then studied transformation of this profile by studying the nurses in the other three grades of education in terms of the influence of (a) the culture of the nursing school; (b) the culture of the hospital wards; (c) the culture of the hostel; and (d) personal interactions of individual students with people from outside. The findings of her admittedly limited study offered valuable insights into an area of considerable significance.

Nutrition

The field of nutrition in India has offered four very different and instructive types of contributions from social scientists.

(a) Reference has already been made to the social science contributions related to the Khanna Study and Narangwai nutrition projects.

(b) Later contributions, which may be regarded as continuation of the above (a) trends, covering mostly areas of nutrition education and nutritional beliefs and practices.

(c) Contributions from a variety of scholars of the country—statisticians, nutritionists, public administrators, economists, ecologists, anthropologists and psychologists—in the form of

their participation in a lively debate on the critical issue of measurement of under-nutrition and poverty and nutrition and mental health.

(d) Contributions to the fields of sociology of knowledge and political economy of undernutrition, nutrition programmes and nutritional research, which emerged from analysis of the trends of work under (a), (b) and (c) above.

India's experience with social sciences in nutrition thus covers a very wide area.

Credit must go to Sukhatme for initiating the debate on measurement of malnutrition and poverty (Sukhatme 1980), (Sukhatme 1978). He seemed to find a number of flaws of statistical nature in Dandekar and Rath's classical study on poverty in India (Dandekar and Rath 1971). He took up the question of range of normality and also raised issues concerning inter and intra-individual variations in term of nutritional needs. His arguments led him to think that individuals who are short in stature and/or have more efficient metabolic system may not require as much nutritional intake as is recommended by various national and international organisations.

Thus, according to him, such individuals should not be branded as undernourished. The most controversial of Sukhatme's contention is that the extent undernutrition in the country is substantially less than what has been estimated by Dandekar and Rath.

There have been rejoinders and counter-rejoinders on Sukhatme's views (Rao 1981), (Krishnaji 1981a), (Krishnaji 1981b), (Dandekar 1979), (Gopalan 1983a), (Sukhatme 1981a), (Sukhatme 1982), (Sukhatme 1981b). There is a reference to the findings to the National Nutrition Monitoring Bureau of the National Institute of Nutrition (National Nutrition Monitoring Bureau 1980), showing on the basis of repeat nutritional surveys of populations in different States of the country, that even if it is accepted that there is very wide range of the 'normal' in the nutritional status in a given population, depending on statistical and non-statistical factors mentioned by Sukhatme, a very large number of people in the country still suffered from severe nutritional deprivation.

Other nutrition scientists have also questioned the scientific validity of the data on which Sukhatme has based his conten-

tions about intra and inter-individual variations (Gopalan 1983b), (Rand and Scrimshaw 1984). There have also been serious concerns about the possible political and social motives behind the campaign to play down the size of the problem of undernutrition in India. One eminent scholar, Asok Mitra (1979), has exclaimed that arguments of people like Sukhatme seemed to be a way of 'solving' India's problem by issuing an 'administrative fiat' to suitably change the definition of malnutrition.

Banerji joined the debate by pointing out the need of relating the data on calorie consumption collected at one point in time with subjective measurement of feeling of hunger over an entire year and even beyond (Banerji 1981b). He has based his contentions on data collected from nineteen villages from different parts of the country which were studied by him for a period of nine years (1972-81) (Banerji 1982b). He contends that, notwithstanding all the statistical debate on quantitative measurement of poverty on the basis of consumption of calories, the fact remains that in these villages (which are economically above 'average'), as much as half of the people said they could not get enough to eat to satisfy hunger all round the year. If satisfaction of hunger is coupled with even small quantities of such nourishing foods as 'dal' or 'ghee', the proportion of the poor rises still further.

He also used his data to draw up a profile of poverty in his study villages to point out that hunger, deprivation, malnutrition and undernutrition are not merely statistical figures: the affected human beings see hunger as a basic threat to their very existence. The responses are cultural, social and biological. Those persons who are unable to withstand the deprivation are weeded out. However, there are a large number of hungry people who manage to avoid being weeded out, but are unable to climb up in the nutrition scale to a level where they can at least satisfy their primordial need of hunger satisfaction. He had also pointed out profound political implications of existence of a very large number of people who somehow manage to escape starvation death, but who, due to sheer pressure of the social, political and economic forces, are forced to hover around dangerously close the starvation death line (Banerji 1983). Their existence at this level make them even more vulnerable

to control by the very people, who in the first place, had pushed them to such a desperate position. Gandhi had been very perceptive when observed, 'Even God does not dare to come to a hungry person, except in the form of food' (Narasimha Char 1951 : 190). Anybody who can throw a few crumbs at them can keep them under control: these people dare not speak out lest they should lose the precious crumbs. The political and cultural implications of living such life are thus far reaching.

Another controversy, which has important social science implications, is on the contention of some nutritionists within the country and abroad that an episode of severe malnutrition in late pregnancy and early childhood leads to permanent damage to the brain (National Academy of Sciences (USA) 1973). This meant that these victims are condemned to be permanently mentally retarded, whatever may be the improvement in their nutrition intake in the subsequent years of their existence.

Banerji had responded to this very serious contention by raising epidemiological, embryological, psychological and political issues (Banerji 1978c), (Banerji 1978d). If the contention is really true, he argued, then the cohorts that were born at the time of severe scarcity conditions during the Russian Revolution, the World Wars I and II, the Bengal Famine of 1943 and the Bihar Famine of 1967, ought to have been permanent mental cripples. This has not been shown to be so.

Embryologically, the economy of the growing human body is such that at the time of scarcity, only the unimportant tissues are sacrificed. Brain cells certainly do not fall in that category. There are also major questions concerning validity of the tools to measure intelligence even in Western countries. Use of such tools on Indian subjects is highly questionable, whatever may be the claims of Indian scholars and their coworkers from Western countries that these instruments have been made 'culture-free'.

Banerji then raised the question of motives of those who were so much in a hurry to brand a large section of the population of the country as permanent mental cripples and the alacrity with which their findings were accepted by political leaders in this country and abroad. He contends that the idea became popular because it was found politically convenient to

the ruling class. The ruling class could take away the political rights of a large section of the population of the country by branding them as mentally retarded. There was thus the additional question of social responsibility of nutritional scientists.

Discussing interplay of economic and political forces in the field of nutrition research in general, Banerji had also pointed out how the market forces have shifted the focus of nutrition research from the human being to the laboratory and laboratory animals (Banerji 1978c). This distortion of research has paid rich dividends to the food and drug industry in the form of increase in sale of tonics, vitamins, trace elements, protein concentrates, amino acids, etc. This has also had its repercussions on the field of nutrition education (Gussow 1982), (Gussow 1980).

A very interesting aspect of sociology of this field of knowledge is that at a time when there is so much of intellectual ferment concerning some key issues in the field of nutrition, blissfully unaware, many of the nutrition scientists in India have continued with research work on the old lines which promote sale of vitamins and tonics, reinforce the old framework of nutrition education (National Institute of Nutrition 1983), (Gussow 1982), (Gussow 1980).

Mental Health

Apart from the thorny question of nutrition and mental health, the All India Institute of Medical Health and Neurosciences, Bangalore, had taken interest in making use of social sciences in the field of mental health. Morris Carstairs had come to that institute as a visiting scholar. From AIIMHN, R.L. Kapur, worked with Carstairs to conduct field work in the village Kota in Karnataka to study interaction of stress, change and mental disorder in the population (Carstairs and Kapur 1976). Scholars at the Post-Graduate Institute of Medical Education and Research (Murthy and Wig 1977) and at the All India Institute of Medical Sciences, New Delhi have also shown interest in developing community mental health as an academic discipline.

Health Economics

Studies in health economics in India are qualitatively different from other social science studies in health. This is because involvement of economists in health issues has come at a still later stage. Health economics is still considered as an embryonic and a somewhat nebulous area of study. Furthermore, in Western countries analysis of hospital costs, escalating cost of providing medical care to a community and health insurance schemes and other problems of financing medical care are some of the principal areas of interest (Abel-Smith 1986), (Muhr 1986). Concepts and methods developed to study such areas are of limited relevance to problems of a country like India (Banerji 1986). Furthermore, unlike other social sciences disciplines, health economics was not considered by foreign agencies to be a particularly important and urgent area of work in India. Besides, health areas form a small and not a very attractive field of work for economists in India. It is still mostly an uncharted area.

However, if making more effective use of limited resources is considered to be a major field of interest in economics, there have been a number of important studies. The series of interdisciplinary studies that led to the formulation of India's National Tuberculosis Programme, which would be referred to in Chapter 10, can be considered a pioneering effort in health economics (Banerji 1971a). The systems study of the family planning programme in the seven districts of Allahabad and Kanpur Divisions of Uttar Pradesh by Mishra and his colleagues (Mishra et al 1982) was another pioneering effort on these lines. The functional analysis of health centres in Punjab and Karnataka and cost studies of different functions of a health centre (Johns Hopkins University 1976) and the NIHAE project to improve the functioning of a district health system (Timmapaya 1972) are other instances of studies undertaken to find ways of making more effective use of resources.

In 1967, Banerji had made an attempt to define the areas for work in health economics in India (Banerji 1967c). He had pleaded for interdisciplinary studies to develop a more scientific approach to determine allocation of resources for health and health service development in the country : what is the role of

health services in improving health and health status of the population of the community as component of social planning for development ? what would be the allocation pattern in terms of preventive, curative, rehabilitative and promotive health services and for family planning ? within an individual sub-sector (e.g. communicable diseases), what factors should determine allocation for different programmes ? what should be the pattern of investment to improve the working of a primary health centre ? By raising such questions, he underlined the organic linkages between health economics, health planning, and interdisciplinary research studies to 'optimise' the functioning of health service systems, employing techniques such as operational research, systems analysis, linear programming and critical path analysis.

P.G.K. Panikar, an economist by profession, has carried out a pioneering study (Paniker 1982) to explain the remarkable fall in death and birth rates in Kerala, as compared to the other states of the country. After giving a background of the socio-political setting, he has pointed out certain features that distinguish Kerala from other states of India : enlightened health and educational strategies of the princely states of the earlier days ; high level of literacy, specially, female literacy ; an extensive and effective public distribution system for food-grains ; effective implementation of land reform measures ; Kerala spends much more on its health services and its proportion to the overall expenditure is higher still ; it has a far more dense network of health services, with a large number of non-governmental health institutions. In his enthusiasm for what has been achieved in Kerala, Paniker not only attributes it to what he calls 'inter-sectoral action for health' in Kerala, but he goes a step forward to claim that resources are not a constraint on health improvement in a state (Paniker 1979).

Interestingly, in the pre-colonial days some very rudimentary, or even simplistic work was done in health economics to provide justification for making heavy investment in specific health programmes. Individual health administrators like Christophers (1924), Ross (1926), G.R. Rao (1928) and Sinton (1938) had all advocated heavy investment in malaria control programme by trying to show how much the disease costs the society. Christopher (1949) measured the costs in terms of

'loss of work and wages of individuals' and in terms of 'cost of providing treatment'. Ross related the economic impact of malaria to the plantation industry in Ceylon. In his widely quoted paper, 'what malaria costs India?', Sinton calculated the cost merely by multiplying the estimated number of days of illness suffered by the victims by the average per capita income.

Availability of DDT as an inexpensive and effective tool against malaria provided a strong economic justification for launching the National Malaria Control Programme (NMCP). Again, economic arguments were a major consideration which swung the decision in favour of switching from NMCP to National Malaria Eradication Programme (NMEP). Ramaiah (1980) has adopted sophisticated quantitative methods to make a 'cost-benefit analysis' of malaria eradication and control programmes in India. He sets out to measure the disease magnitude without NMCP and NMFP and monetary costs due to morbidity and mortality. In this process he discovers major limitations in the availability of data. He is compelled to base his assumptions on questionable grounds. In addition, because of his inability to take into account many important epidemiological, ecological, technological and administrative variables, one can point out many shortcomings in the model developed by him to process the data. Earlier, in 1976, Ramaiah (1976) had attempted to make cost-benefit and cost-effective analysis of the intensified campaign against smallpox in India, which suffered from even more serious infirmities.

Much more extensive quantitative analysis of India's problem of pulmonary tuberculosis was attempted by scholars like Feldstein and his colleagues (1973). Using the case of tetanus, Sharma and Sharma (1982) have made a more modest effort at computer simulation of epidemiological models as an approach to health planning.

Apart from the very important issues concerning the use of quantitative methods of costs and benefit/effectiveness referred to above, scholars like Dasgupta (1973), Rao (1976) and de Bernis (1976) have raised an even more fundamental question whether the methodology of cost-benefit analysis is at all relevant in studying problems of health and disease in a community.

Bernis has been one of the first to call into question some of the fundamental postulates of the prevailing thinking on health economics based on neoclassical theories. Referring to 'human capital', he observed (Bernis translation from French) : 'fifteen years ago some American economists began to speak of investment in man as distinguishable from investment in things. Another step was made with the expression of *human capital*. So the health sector became an investment sector. So everybody is a declared capital owner, and everybody has a profit, a rate of return on one's capital'.

Bernis had also expressed serious reservations concerning the relevance of the methodology of cost-benefit analysis in health fields. Such a methodology, he argued, would have to be based on hypothesis which are obviously untenable :

- all costs and all benefits can be identified by an analysis in terms of prices.
- all prices clearly express the real scarcity tensions on a pure market.
- all costs and benefits incurred or obtained at different periods can be reduced to single figures equivalent, related to the same calender date by means of discounting procedure, and we have at our disposal a scientific determination for a single rate of discounting.
- projects are all independent and the non-implementation of one has no effect on the other.
- the usefulness of a project is measured by the degree of its profitability and a comparison between projects can be made only on this basis.

In the field of population control, Simmons (1971) has produced a monograph on economics of the family planning programme in India. Taking an entirely different perspective, Rao (1977) has questioned the idea that the number of births prevented is : (a) a function of expenditure on birth control and that (b) it is associated with economic growth.

There have also been some straightforward studies on cost analysis studies in hospitals. Prabha Ramalingaswami (1984) has attempted to develop a methodology to estimate cost of medical education, taking a purposive sample of 14 medical

colleges in India. The method of statistical quality control and other costing techniques have been used in hospitals in India to improve their functioning (Mehta 1974), (Nagpal 1975), (Kuppuswami 1971), (Brij Mohan 1975), (Srivastava 1974).

The Health Survey and Planning (Mudaliar) Committee (Government of India 1962) had shown considerable interest in examining how far health insurance schemes can be employed to finance medical care services in India. K.S. Sanjivi (1976) experimented with a pre-paid project on Mini Health Centres in Tamil Nadu, while M.V. George (1976) examined the possibilities of popularising rural cooperative dispensaries in Kerala. None of these studies could yield a realistic and a viable framework for developing pre-paid medical care scheme on a large scale (Banerji 1986b).

Social Science Content of Education and Training Programme

Over the past three-five years, India has developed a substantial capability for imparting education and training in social sciences to a large variety of health workers: training top level health administrators at one end to male and female multipurpose workers and community health workers, at the other (Banerji 1985a : 77-87). Social science content forms a part of the curricula for training physicians in institutions for orientation training of new entrants into health services. Reorientation training of senior personnel working in such fields as family planning, health education, communicable diseases, nutrition, maternal and child health, hospital administration also have substantial social science content. Social sciences also form an important component of the staff college course meant for senior level health administrators (National Institute of Health Administration and Education 1968). Social sciences have also been included in the curricula for basic training and reorientation training of paramedical workers/multipurpose workers in the family planning, maternal child health and communicable disease control/eradication programmes.

Considerable efforts have also been made to develop curricula for education of physicians (Medical Council of India 1982), both at the undergraduate and postgraduate levels as well as for such specialised degree/diploma programmes as hospital administration (Banerji 1967) and health education (Banerji 1982). There are a number of universities which provide social science courses which are specifically related to health fields—e.g. medical sociology, medical anthropology and medical social work (Indian Council of Social Science Research 1973), (Ahluwalia 1972). The Centre of Social Medicine and Community Health of the School of Social Sciences of Jawaharlal Nehru University (1986) is given the mandate to build education programmes for social scientists and community health physicians and nurses which specifically deal with the major health problems that afflict the masses of the people of the country.

Search for an Alternative Health Service System

Ivan Illich's critical analysis of the Western system of medicine (Illich 1977), (Borremans 1978) stimulated widespread critical examination of and a search for an alternative system for India. The Western system had retained its dominance in independent India, and the effort was not to reject the central scientific core of Western medicine, but to divest it of current cultural and economic accretions which had formed a thick capsule around the central core through extensive iatrogenesis, professionalisation, centralisation and mystification. The example of the 'barefoot doctors' of China (Sidal and Sidal 1975) gave a further impetus to this line of thinking. It also led to the re-discovery of the recommendations of the National Planning Committee, Sub-committee on National Health (1948) which had, way back in 1940, made a recommendation similar to that of employment of barefoot doctors, to meet the health service requirements of the rural masses.

The secretary of the Indian Council of Social Science Research at that time, J.P. Naik, was the foremost among Indian scholars who wanted to implement Illich's ideas and transform the health care system of the country. He got an opportunity to give a concrete form to his ideas when, as a

member of the Government of India Group on Medical Education and Support Manpower (1975) (Shrivastav Committee), he persuaded his colleagues to join him in recommending steps which in effect led to the initiation of action to shift many decisions concerning health to the people themselves and in this way promote self-reliance. Naik's persistent efforts to promote community self-reliance in health matters received powerful support when, in the wake of the excesses committed during the Emergency of 1975-76, the new government adopted the policy of entrusting the people's health to the people's hands through training community health workers chosen by the people themselves.

While, at a conceptual level, Naik brought about a basic rethinking about health services that has greatly influenced their development since then, it also brought into a sharp focus the enormous problems involved in translating this concept into concrete action programmes.

Naik was again the moving force in the calling of the National Symposium on Alternative Approaches to Health Care in India in Hyderabad in 1978 under the joint auspices of the Indian Council of Medical Research and the Indian Council of Social Science Research (ICMR-ICSSR 1976).

Following the ICMR-ICSSR Symposium, Naik started to develop a sounder conceptual basis for formulating an alternative. In his monograph, *An Alternative System of Health Care Services in India*, he brought together three streams of thought (Naik 1977) : those represented by the report of the Shrivastav Committee; those of Banerji (1977); and his own ideas, developed out of the thinking of the first two. He focussed on the unserved and the underserved as target groups, emphasised preventive and protective aspects, choice of technology and delivery system and promoting demystification, deprofessionalisation and democratisation.

To give a more concrete shape to his ideas, J.P. Naik successfully promoted the setting up of the ICSSR-ICMR Study Group on an Alternative Strategy for Health Services in India (ICSSR-ICMR 1981). The Study Group consisted of eminent health professionals, social scientists and planners. According to this Study Group, the objective of the national health policy should be to provide health for all by A.D. 2000. It contended.

that this objective cannot be achieved by a linear expansion of the existing system and even by tinkering with it through minor reforms. Nothing short of a radical change is called for ; and for this it is necessary to develop a comprehensive national policy on health. If this goal is to be realised, a major programme for the development of health care services is necessary but not sufficient. The Study Group came to the conclusion that during the next two decades (1) integrated overall development including family planning, (2) improvement in nutrition, environment and health education, and (3) the provision of adequate health care services for all and especially for the poor and underprivileged (through the creation of an alternative model), will have to be pursued side by side.

CHAPTER 8

Institutions for Promoting Social Sciences in Health

The apical public health institute of the country, All India Institute of Hygiene and Public Health, Calcutta, had a social scientist of the rank of a professor since the early fifties. Very soon three more national health institutions—Central Health Education Bureau, New Delhi, the National Institute of Health Administration and Education, New Delhi (NIHAE) and Central Family Planning Institute, New Delhi (CFPI) had set up strong social science units headed by similarly high ranking social scientists. In each one of these four institutions, social scientists were expected to work closely with workers from other public health disciplines.

The National Tuberculosis Institute (NTI) at Bangalore, set up in 1959, is an even more distinctive organisation because here a Sociological Section headed by a national social scientist working along with his WHO counterpart, was specifically mandated to work closely with other Sections dealing with epidemiology, public health administration, phthisiology, microbiology, radiological engineering, statistics and public health nursing, to formulate a nationally applicable, socially acceptable and epidemiologically effective national tuberculosis programme for India (Chakraborty 1979). As will be discussed in Chapter 10, the work done at the Sociological Section of NTI in research, programme formulation, training, implementation and evaluation has provided a basis for crystallising an alternative methodological and conceptual approach to use of social sciences in health fields.

The Rural Health Institute at Gandhigram in Tamil Nadu (Gandhigram Institute of Rural Health and Family Planning

1971)—a non-governmental organisation, which also received considerable support from the Ford Foundation—had also set up a strong social science unit in the early sixties for conducting interdisciplinary research and training in community health. As pointed out in Chapter 6, a private organization, the Operations Research Group at Baroda (Operations Research Group 1972), has conducted important social science studies in the field of family planning.

As mentioned earlier, social scientists have also been important members of interdisciplinary project teams which had conducted major community health research studies in the country. In fact, the Research-cum-Action Project on Environmental Sanitation, which was carried out as a Government of India-Harvard School of Public Health-Ford Foundation project, is the first instance of use of social sciences in health fields in India. Reference has also been made to the long-term projects in the form of the Khanna Study and the Narangwal Studies and the NIHAE projects on integration of health services and district health administration.

Positions for social scientists have also been created in many state health education bureaus and some of the departments of preventive and social medicine in medical colleges (Central Health Education Bureau 1980). Launching of a nationwide family planning programme in the early sixties was also associated with the setting up of a number of institutions for training and research which have social scientists as staff members.

Apart from CFPI/NFPI, AIIHPH, CHEB and the Institute of Rural Health and Family Planning of Gandhigram, two more institutes, one in Bombay and the other in Nagpur, came into being serve as Central Institutes (Banerji 1985a:202-04). In addition, forty-six Regional Family Planning Training Centres (which later become Regional Health and Family Planning Training Centres), one for every 10 million population, were set up. All these institutions had a social science unit, which actively participated in the training of health personnel (Banerji 1985a:203).

Ten Demographic Research Centres and nine Family Planning Communication Action Centres were set up in different parts of the country to conduct research on various aspects

of family planning (Banerji 1985a;205). These centres were almost exclusively staffed by social scientists. Later on, these centres were reorganised and consolidated, and they now exist in the shape of fifteen Population Research Centres in different parts of the country. Social scientists in institutes of management, particularly, in the Indian Institutes of Management at Ahmedabad, Calcutta and Bangalore, the Administrative Staff College at Hyderabad, and the Indian Institute of Public Administration, have been involved in the field of health and family planning for a considerable time. Indian Institutes of Technology at Kanpur and Bombay have also made significant social science contributions to these fields.

The Indian Council of Social Science Research (ICSSR) was set up as an autonomous body by the Government of India to serve as an apical organisation to promote social sciences in India (Indian Council of Social Science Research 1973). It had identified health services as one of its fields of interests at an early stage. Apart from commissioning review of social studies and providing financial assistance to support education and research, ICSSR had been very actively involved in imparting a social orientation to education of physicians (Indian Council of Social Science Research 1975) and to health manpower development in general (Government of India 1975). Formulation of an alternative health care system had been another substantial area of its direct contribution (Indian Council of Medical Research and Indian Council of Social Science Research 1976) (Naik 1977). This culminated in the preparation of a blueprint for attaining health for all by A.D. 2000 by a Study Group set up at the initiative of ICSSR in collaboration with the Indian Council of Medical Research (1981).

Universities and other institutes of higher education, both within the country and abroad, have also been important in the training of social scientists. In a study conducted in 1973 (Indian Council of Social Science Research 1973:5c16), it is reported that there were as many as 866 university departments covering various aspects of social sciences in the country. Eighty-eight of them were for sociology, 66 for psychology, 24 for public administration and 20 for anthropology. These departments provide the basic manpower for the social science units within health organisations. Besides, some scholars in universi-

ties have developed an academic interest in aspects of medicine and public health—e.g. professionalisation, hospitals, health behaviour, perception of health problems and health institutions and motivation for health action. Many of them have organised health related courses in their programmes of studies in their departments. Reference has already been made to the Centre of Social Medicine and Community Health of the School of Social Sciences of Jawaharlal Nehru University (1986).

Many scholars from foreign countries have also conducted field work in India on health related issues.

It may, however, be noted that the general approach of scholars from universities has been qualitatively different from the social scientists who work in health institutions. In the former case, interest in health fields happen to fall within the purview of a scholar's research activities. In the case of social scientists working in health institutions, health issues become the central concern. Quite often they have been specifically asked by their employers to relate their contributions to wider issues involved in the working of health services as a system.

CHAPTER 9

An Assessment

The many palpable defects in the works of social scientists in health fields should not be allowed to obscure some very substantial achievements. Perhaps foremost among them is the degree to which it has been possible to institutionalise social science disciplines as a means to study and develop health services in India. The stage has now been reached when it is no longer necessary to make conscious efforts to bring in social sciences in health fields. As a result of efforts of the past three decades and half, they have come to be regarded as almost a logical or a natural component of the spectrum of disciplines required for formulating health policies, plans and programmes and for their implementation and evaluation.

Indeed, in 1979-81, the Indian Council of Social Science Research was an equal, if not the more dominant partner, along with the Indian Council of Medical Research, in drawing up a blueprint for an Alternative Strategy for Health For All by the Year 2000 (Indian Council of Social Science Research and Indian Council of Medical Research 1981). Social scientists actively participate as faculty members in the training of physicians and of almost every category of health workers. They are being increasingly involved in the basic training of different categories of health workers. They have also been assigned positions at different levels in the health administration of the country. Some hold pivotal positions in institutions which have been established to emphasise the social and demographic dimensions of the health and family planning services in the country. There are few countries in the world—developed or developing—which have acquired this degree of institutionalisation of social sciences within their health service systems.

The initiatives taken by the Harvard Group to launch a series of interdisciplinary community health research projects, which had such a heavy involvement of social scientists, can be considered as a basic cause of institutionalisation of social sciences in health fields. Reciprocally, these projects can also be considered as results of a social historical situation which provided a fertile ground for the institutionalisation of social sciences. One result of this relationship was the rapid increase in the capacity of the community health institutions in the country to undertake social science work in various fields.

Subsequently, it has also been possible to launch major interdisciplinary projects on integration of health services, district health administration, hospital administration, study of entire health and family planning systems and community health workers' scheme. There were also major studies on human fertility. The range of social science studies have expanded rapidly from the original efforts at health education and family planning. Social scientists have been drawn in to work in fields like community health behaviour, social aspects of communicable diseases, social dimensions of India's problem of nutrition, hospital administration, health economics, health manpower development, professional socialisation and mental health.

Finally, the institutionalisation has struck such deep roots in the country that the failure of social scientists to respond fully to the health needs in India with the Western reference frame of social sciences stimulated the formation of an alternative reference frame. This will form Part Three of this presentation.

The failures of the social scientists have been monumental. With increasing institutionalisation of social sciences, these have become all the more glaring. It was bad enough that social scientists allowed themselves to be caught within the straitjacket of the Western reference frame, which is basically atheoretical, apolitical and ahistorical. Worse still was their failure to generate a body of knowledge to respond to the needs. In the 1956 Conference of Social Scientists on the Social and Cultural Factors in Environmental Sanitation in Rural India (Government of India 1957), some of the most eminent social

scientists of India confessed 'that their researches had so far not been of such an order as to cover in a direct way all the relevant factors of change'. Nirmal Kumar Bose was frank enough to say, 'Social scientists in India have never applied their minds to the problem... We have no adequate answers to the specific questions asked'. 'Anthropologists are not competent to answer practitioners' problems' exclaimed M.N. Srinivas. Unfortunately, despite their clear recognition of the need to work in this field, few of the scientists have made an attempt to rise to the challenge. The state of affairs is no better today; it may even be worse.

The work of many social scientists show that they lack the depth of scholarship needed for their job. Reviews of their work by Dhillon and Kar (1963), Krishnamurthy (1968), Pareek and his colleagues (1972), Banerji (1973a), Rao (1974) and Trakroo and Kapoor (1981), have shown that in most cases there have been major defects in the conceptualisation of the problem for social science study. There have been numerous instances of gross inadequacies in the study design, in the process of data collection, in the analysis and the inference and, finally, in relating their ideas and findings to the problems in various aspects of development of health and family planning services.

The writings of social scientists working on various health institutions actually provide documentary evidence of very poor state of their scholarship. It is indeed a big task even to single out any publication from social scientists working in major health institutions, which has made a significant impact on development of health and family planning service in the country; nor is it possible to identify any contribution which has made an impact on a specific social science discipline. Most of the writings have not proceeded beyond the form of mimeographed papers, many of them so general and bereft of academic form that the authors did not even take the pains of naming references to the issues discussed.

Most of the social scientists working in the health institutions seem to be caught in a vicious circle, which has generated its own 'culture of mediocrity'. In the course of collecting materials for this book, the author had personally interviewed many key social scientists and he observed that this 'culture of

mediocrity' is so stupefying that they have become oblivious of the new ideas reported even in the books and journals that directly relate to their own field of work. As indicated earlier, the malady afflicting many of the social scientists who work in the health fields is a part of the larger malady of the social sciences in India in general. The works of Oomen (1978) and of Madan (1980), discussed in Chapter 6, offer good examples.

This lack of attention even to such basic issue as to selection of study population was also found in the works of G.S. Ghurye (1973), who was the first to hold the chair in the first department of 'modern' sociology in the country. Describing the sample for his 1938 paper entitled, *Sex Habits of a Sample of Middle Class People of Bombay* (Ghurye 1938b), which he republished with some additions as late as in 1973) Ghurye states, 'two thousand copies of it (i.e. the questionnaire) were distributed to middle class persons, normally residents of Bombay, through the agency of second and third year research students as well as through some other friends . . . As a result of repeated calls I received 311 schedules filled in by Hindu males' (p. 288).

The contributions from scholars from Western countries, who initiated social science work in health fields in India, are not encouraging either. With the hindsight of thirty-five years, it can now be seen that prognostications made by Carstairs (1955) and by Marriot (1955a) on health behaviour of rural populations were far off the mark. Apparently, as a hangover from the colonial past and because of the considerable power and prestige they enjoyed in India, these scholars have been quite overt in imposing their own values in conceptualising the problems. They showed a pronounced technocentric bias. This had clearly coloured the methods used for data collection and their analysis and their interpretation.

Many of the social scientists from USA, who worked as consultants in different projects and programmes in India, had been scholars of eminence in their fields in their own country. However, inspite of all their efforts, it had not been possible to lay a sound foundation to ensure a coordinated and cumulative growth of knowledge. Sometimes, as pointed out by Brown and Margo (1978), this knowledge proved to be counterproductive, as it was used to blame the victims, and it tended to

provide an aura of respectability to plans and programmes that had been intrinsically defective.

There was also a built-in bias in the flow of knowledge—it flowed from developed to an underdeveloped country. The influential consultants could 'sell' approaches favoured by them—e.g. diffusion models, adoption models, achievement motivation, and research-cum-action and communication-action-research methodology—to their Indian counterparts.

Discussing this aspect, George Foster (1982) has made a very insightful observation: '... almost all assume that effective health care can be achieved only when members of traditional communities change their health behaviour. Rarely, if ever, the question is asked, "How can anthropologists help to change bureaucratic behaviour that inhibits the design and operation of the best possible health care system?" ... We would like to study health bureaucracies, attempt to determine ways in which their structure and operations might be changed to offer more effective services and communicate to health personnel the urgency of making these changes.' As would be pointed out in the next chapter, George Foster belongs to the minority group of 'Western' scholars who have contributed to the formulation of an alternative paradigm.

The foreign consultants, who belonged to the dominant group of 'Western' scholars, exercised powerful influence on Indian decision makers in setting up the institutions and in the choice of personnel to fill the key posts. As many of the consultants staked their prestige behind a particular line of thinking (e.g. extension education), they used their power and patronage to protect and strengthen their positions. As a result, the milieu became inimical to creative thinking. Even when alternative ideas emerged from other foci (as was the case with the National Tuberculosis Institute), active efforts were made to ignore or even suppress such ideas (Banerji 1985a : 315-16), (Banerji 1978a), (Banerji 1980a). This was perhaps the most unfortunate outcome of the intervention of the foreign consultants. They have to share at least a part of the responsibility for the formation of the 'culture of mediocrity' among the Indian social scientists.

PART THREE

Alternative Approaches

CHAPTER 10

Starting from the People

Alternative Concepts

In the alternative approach to use of social sciences described below, people, rather than a predetermined and pre-packed medical technology, set the pace. Instead of using social science to 'educate' people to accept what is handed down to them from above, here medical technology is brought under social control : it is the needs of the people that should determine the content and choice of medical technology and health services.

Formation of a body of knowledge for such an alternative approach requires : (a) alternative ways of conceptualising and defining social science problems in health fields ; (b) development of methodological approaches that are appropriate for studying the problems ; and (c) using the social science data to identify or to develop people oriented medical technologies.

For starting from the people for health service development, it is necessary to consider a wide range of data concerning the people. The social and cultural status of a community at a given time is an outcome of historical and social-cultural processes determined by changes in human ecology. Ecological conditions also generate various types of problems, including community health problems. To respond to these conditions, human groups have been developing a symbolic system of meaning which interfaces with nature (i.e. their culture). There is thus close interaction between ecology, epidemiology, history and socio-cultural process. They all are based on the modes of production and production relations.

The culture of a human group shapes the perceptions of different health problems, which, in turn, determine the cultural

meaning. The culture also determines the response of the group, both in terms of formation of institutions for dealing with different health problems and in determining the behaviour of individuals when they encounter such problems.

George Foster (1958) has been one of the few social scientists (a 'Western' social scientist!) who had called into question the then widely popular 'above-down' approach of health social scientists and pleaded for an alternative strategy which started from an understanding of what people actually did in relation to a health problem or a health practice and why they did so. He had emphasised the necessity of 'distinguishing the true clinical core of scientific medicine and the surrounding folklore, magic, custom and faddism that are included in our institution of medicine'. At the time when the social scientists working with the Harvard Group were making vigorous efforts to make people use sanitary latrines in the RCA Projects, putting the point of view of the people, Foster drew attention to many weighty considerations which justified a contrary attitude and behaviour. He gave the instance of rural Iran, where, 'overlooking the fact that the dry atmosphere dries up fecal matter and (so) flies do not breed, exponents of "advanced" Western public health methods produced latrines, which, when used, became stinking fly breeders.'

As pointed out in Chapter 9, at a much later stage (1982), taking an even stronger position against the tendency of many health social scientists to manipulate people so that they accepted whatever is offered to them by health bureaucracies, Foster (1982) observed, 'The striking thing about these questions is that almost all assume that effective health care can be achieved only when members of traditional communities change their health behaviour. Rarely, if ever, the question is asked : "How can anthropologists help to change bureaucratic behaviour that inhibits the design and operation of the best health care system" ?'

Social Science Studies at the National Tuberculosis Institute, Bangalore

Social science work at the National Tuberculosis Institute, Bangalore (NTI) had started in 1959. This was the time when

Harvard Group was also engaged in a number of major health projects in India. An alternative approach emerged from the studies conducted at NTI. This was the start of a parallel movement in developing social sciences in health.

There can be a number of reasons why NTI became a focal point for developing the alternative approach. NTI had a very high quality of leadership from P.V. Benjamin from the Indian side and from Halfdan Mahler from the WHO side. It had strong political support from the then Prime Minister, Jawaharlal Nehru. It has been an integral component of the Directorate-General of Health Services of the Government of India. NTI was mandated by the Government of India to develop a nationally applicable, socially acceptable and epidemiologically effective tuberculosis programme for India and for this purpose it could build an effective interdisciplinary team of Indian scholars, along with their WHO counterparts. Both the social scientists members of this team were somewhat 'atypical', when compared to those who had been working with the Harvard Group and with CHEB, NIHAE and CFPI. The WHO sociologist, Stig Andersen had his education in economics and sociology at the University of Copenhagen, following the continental tradition. Debabar Banerji, who was the Indian counterpart, is basically a physician who had set out to work in Western Tibet and in interior Himalayan regions (in 1956) to relate medical technology to the local people, before he joined NTI. Only at a later stage (1963) did he obtain a master's degree in cultural anthropology from Cornell University.

Because of their different orientation, the social scientists asked different types of questions regarding the problem of tuberculosis in India. They did not follow the traditional line of finding ways of 'manipulating' tuberculosis patients so that they participate in 'case-finding' and 'case-holding' operations launched through mass radiography or tuberculosis clinics. Nor did they follow the footsteps of scholars like Marriot or Carstairs in writing detailed account of exotic health practices in 'traditional' societies. They decided that formulation of a national tuberculosis programme should start from an understanding of the people concerned : they 'went to the people to learn from them'. The research questions were : how do tuber-

culosis patients in a rural community respond to the disease ? how many are at least *conscious* of the symptoms of the disease ? to how many are the symptoms cause of *worry* and how many take *action* about their symptoms ? In other words, the research was meant to give a sociological dimension to the epidemiology of tuberculosis in the country. Closely following an epidemiological survey of tuberculosis in Tumkur District of Karnataka (Raj Narain et al. 1963), a careful sociological study was designed at the Sociological Section of NTI in 1960 (Banerji and Andersen 1963) to measure the degree of awareness of the patients in terms of 'consciousness', 'worry' and 'action'.

The findings from the study were very revealing. At the time when there was a strong tendency to seek the help of social scientists to 'catch' people for mass radiography, it was found that, motivated by the suffering caused by the disease, as much as half of all infectious cases in the population had sought assistance from government rural health institutions and almost invariably they were sent back from there with a bottle of cough mixture. Another quarter of the cases were worried about the symptoms (chronic cough, fever, pain chest and blood in sputum) and almost all of them (95 per cent) were at least conscious of them. Implications of these findings were of far reaching significance :

1. *Concept of Felt Need : Area of Overlap of Felt Need and Epidemiologically Assessed Need.* This was the most significant finding. It gave an entirely new direction to programme formulation—away from conventional approach of mass radiography, mass BCG inoculation and specialised tuberculosis clinics. It enjoined that the first priority be given to those epidemiologically assessed cases who also had felt need for services. As this principle can be generalised to cover a wide range of community health problems, it forms a cornerstone of the new social science approach to health presented here.

2. *Integration of Tuberculosis Programme with General Health Services.* Tuberculosis patients showed the way ; motivated by the suffering caused by the disease, they sought assistance mostly at rural health institutions.

3. *Social Orientation of Technology.* The problem was : how to diagnose and treat tuberculosis patients in remote rural

health institutions? By using data concerning prevalence of chronic cough in the general population, it was possible to devise a simple way of diagnosing the cases—by making a smear examination of sputa of chronic cough cases visiting the institution because all tuberculosis cases were at least conscious of cough. This was thus one of the first instances of subordinating technology to the needs of the people—deprofessionalisation, demystification of medicine and increasing the capacity of the people to cope with their own health problem. One interesting outcome of adoption of this technology was that there has been a very sharp and sustained decline in the number of physicians who specialised in tuberculosis.

4. *Dynamics of Felt Need.* Any given level of awareness—consciousness, worry or action—is a function of socio-cultural situation. The introduction of a felt need oriented tuberculosis programme will affect this equilibrium. When people find that they have a more effective way of alleviating the suffering caused by the symptoms of the disease, then many, who were earlier only worried, will be motivated to take action; similarly those who were only conscious will get worried and may even join the group having action awareness. A felt need oriented programme thus has a built-in system for generating more felt needs in the community.

5. *Concept of Health Culture.* The findings showed that health behaviour of a community cannot be studied in isolation. It is influenced by the degree of access to effective services. These two (i.e. health behaviour and access) also interact with cultural perception and meaning of a health problem. Because of improvement in the access to effective services, the earlier perception that tuberculosis is stigmatising disease, almost invariably ending in death, has changed considerably. Therefore all these factors should be considered together. This interacting complex whole has been termed as Health Culture.

6. *Epidemiological Strategy and Acceptability and Cost Effectiveness.* The data on awareness revealed that a felt need oriented programme has the potential of covering almost all the infectious cases in a community (Banerji and Andersen 1963). Its potential for coverage is thus much higher than what could be expected from mass campaigns (Sikand and Raj Narain 1957). Further, there is considerable historical evidence

that the incidence of tuberculosis in many parts of the world had declined significantly long before the bacillus was discovered and that this possibility cannot be ruled out in the case of India (Dubos and Dubos 1952), (Gothi 1976), (Gothi 1978) (Grigg 1958). If that is the case, the mass campaign approaches will turn out to be an even more costly and wasteful venture. This contingency is avoided when the approach is based on community felt needs. The latter approach is also more acceptable to the community. Therefore, in terms of cost too, it is much less expensive.

7. *New Approach to Health Education.* The data have shown that a large proportion of tuberculosis cases are literally knocking at the doors of health institutions. They thus rule out any need for mass health education drives based on blaming the victims and practising motivational manipulation on them. On the contrary, as pointed out by Foster (1982), the data underline the need for change in the bureaucratic behaviour required for meeting the felt needs of the people. The fact that even after more than two decades of implementation of the National Tuberculosis Programme in India, a substantial proportion of tuberculosis cases are still being turned away with a bottle of cough mixture (Chakraborty 1979), (Banerji 1985a: 109-16), shows that it is much more difficult to change the behaviour of health administrators and teachers of tuberculosis and chest diseases. The question of generating additional felt need through education of the public will arise *only* when (a) the organisation has met all the existing felt needs and, (b) the organisation has additional capacity to meet the extra needs that is sought to be generated through health education.

8. *Tuberculosis as a Problem of Human Suffering.* By imparting a sociological dimension to epidemiological data, it was possible visualise the problem of tuberculosis, indeed any community health problem, as essentially a problem of human suffering. By measuring a health problem in terms of the suffering it causes to an individual, it was possible to develop an alternative perspective for social planning for health in a country. NTP is visualised as an integral part of the general health services and, therefore, the suffering caused by tuberculosis ought to be assessed along with the suffering caused by other community health problems. In other words, this

ensures that investment in NTP is made proportionate to the degree to which it alleviates the suffering caused by health problems as a whole.

9. *Improvement in Precision of Diagnosis of a Case.* Interestingly, by measuring the problem of tuberculosis in terms of human suffering it has been possible to develop a 'feedback correction factor' to improve the precision of radiology as a diagnostic tool. Overdiagnosis is a well known phenomenon in radiological diagnosis (Raj Narain 1968). By giving primacy to suffering—i.e. to felt need—it is possible to selectively avoid the false cases, because, as the sociological study of the tuberculosis cases have revealed (Banerji and Andersen 1963), false cases are likely to cause very little suffering or no suffering.

The NTI social scientists were also actively involved with the rest of the interdisciplinary team in conducting research studies in the formulation of the National Tuberculosis Programme (NTP). It was realised that NTP will be a highly complex system—an organised complexity, with a large number of interacting variables pertaining to a number of disciplines. It required inputs from epidemiology, public health administration, pthisiology, microbiology, radiological engineering, public health nursing, statistics and social sciences. More importantly, a single independent variable was found to influence many dependent variables, and each one of the latter in turn, acted as an independent variable influencing large number of other variables within the systems. NTI chose to adopt an approach of operational research (Andersen 1964), (Banerji 1972), (Luck et al 1971) to identify a system which, within the socio-cultural and political constraints and within the limits of available resources, offered an effective mechanism for dealing with the problem. This meant defining the problem; obtaining certain key data required for its solution; formulating alternative ways of solving the problem; developing a methodology for making forecasts about the alternatives and choosing the most effective solution; testing the validity of the choice of the solution under 'real life' conditions (without any special inputs); and implementing the solution on a nationwide scale, with a built-in monitoring system.

01931

HP-100

COMMUNITY HEALTH CELL

326, V Main, 1 Block

Koramangala

Bangalore-560034

India

Most important, this approach had made it possible to test the soundness of some of the key conclusions drawn from the sociological studies, namely motivated by the suffering, infectious cases do visit rural health institutions. Also these cases can be diagnosed by making smear examination of those with chronic cough, and the meeting of felt needs was demonstrated to generate more felt needs. By subjecting a system, which has a major sociological component, to test under 'live' field conditions, it was possible also to test the conceptual basis and the validity and reliability of the tools used in the study. This testing of concepts and methods through feed-back data from 'operationalisation' of social science findings is another distinctive feature of the alternative approach.

Following the trend of thought in NTI, the sociologists also questioned the traditional definition of a treatment defaulter as one who does not continue the treatment prescribed by doctors for at least twelve months (Banerji 1970). This was considered to be too technocentric, arbitrary and obviously value-loaded. Instead, the sociologists at NTI offered a much more realistic epidemiological and sociological definition—a defaulter is one whose actions cause suffering to him/her or to other members of the community over a time span. Field studies of the problem (Banerji 1967a), (Singh and Banerji 1968), revealed that health administrators are by far the worst of the defaulters—for example, they still allow hundreds of thousands of tuberculosis cases to be dismissed with a bottle of cough mixture; they cause enormous suffering among the diagnosed cases by failures in the maintenance of supply of drugs and by failing to implement NTP effectively. Many were branded as defaulters because of defects in definition of a case and dogmatic attitude towards the treatment regime (Gothi 1978), (Raj Narain 1968). Finally, there was a core of patients who indeed inflicted suffering on themselves or on others in the community because they failed to take the treatment. This itself became an issue for sociological study—why is it that some patients adopt such an obviously destructive or even suicidal attitude? Probably, a counterpart of this group of defaulters is also found in Western countries among tuberculosis patients who are also vagrants; the only difference being that

the proportion of those who live a life similar to a vagrant is much higher in a country like India. This approach contrasts sharply with victim blaming studies of 'case holding' among tuberculosis and leprosy patients by the 'traditional' medical sociologists (Gupta 1965), (Mutatkar 1984).

The ideas developed at NTI also found almost universal acceptance at the global level. The 1964 report of the WHO Expert Committee on Tuberculosis (WHO 1964) fully endorsed the new approach. Even when tuberculosis specialists in India had shown concern about slow progress of the programme, they have not questioned the basic approach (ICMR 1977). Speaking at the Silver Jubilee Celebration of NTI in November 1985, Halfdan Mahler, who is now the Director-General of WHO, declared that the health philosophy generated at NTI led straight into the concepts of the Alma Ata Declaration and 'Health for All by the Year 2000' (Mahler 1985).

A significant feature of the design of the NTP is that failures in its implementation has forced tuberculosis specialists to seek solutions to problems within the general health services. This search led to the realisation that, apart from specific managerial and technological processes, health services development is also a political process and a socio-cultural process, with their roots in history of the community or society (Banerji 1985b). It thus opened up a very wide field for enquiry concerning social parameters of health and health service development. It may, however, be emphasised that while the foundations of the edifice of health and health services of a country are formed by the socio-cultural and political forces of a society emerging from historical changes, there is considerable scope for social studies of managerial and technological aspects, based on epidemiological perspectives.

New Approaches to Health Education and Population Control

As pointed out above, the NTI sociological studies led to formulation of new approaches to health education. This approach also received endorsement from the WHO Expert Committee on New Approaches to Health Education for Primary Health Care (World Health Organization 1983).

The Expert Committee disapproved the conventional approach, which is described by it as paternalistic, patronising, manipulative and victim blaming. Instead, it pleaded for greater understanding of people, including their felt needs, development of people oriented technology, promotion of self-reliance and giving primacy to conditions where there is overlap of community felt needs and epidemiologically assessed health needs. This, incidentally, is also the theme of the alternative suggested in the National Health Policy (Government of India 1982).

In this parallel stream of development, considerable attention was also paid to the problem of population growth and the family planning programme. Moving away from the conventional strategy of motivational manipulation of people through extension education and mass communication drives, use of coercion, monetary incentives and from the KAP type research studies, a much more fundamental question was raised: is population growth the cause of poverty or is it the poverty which is a basic cause of population growth? (Banerji 1980a). It was asserted that generation of motivation for a small family norm requires action to improve socio-economic conditions of the people—e.g. health, water supply, nutrition, education, women's status, employment, etc. (Banerji 1971b:31-35). An interesting NTI type of question was raised concerning the operation of the family planning programme itself: the programme does not have enough of an outreach into a community to meet the already existing felt needs of the people for contraception. Studies have shown that, despite vigorous family planning drives, there remain substantial unmet needs for family planning services (Banerji 1973c). Studies have also been carried out to depict how the family planning programme looks like from the side of the people (Banerji 1973c). There was also a detailed study of the community response to the intensified family planning drive during the Emergency of 1975-77 (Banerji 1977a).

Analysis of the findings of this study led to deeper socio-logical exploration of India's family planning programme (Banerji 1980a):

1. Study of sociology of knowledge concerning family planning: how efforts were made to actively 'generate' know-

ledge in support of the approach that was being followed by the decision makers and how studies which might challenge their ideas were ignored or even actively suppressed.

2. The role of foreign agencies in the formulation, implementation and evaluation of the programme.

3. Analysis of the political and economic forces which have shaped population policies and programmes in India.

CHAPTER 11

Analysing Family Planning and Community Health Behaviour

Analysis of the Family Planning Programme

Unlike the field of public health, where the Harvard Group should get a major credit for promoting social science studies, the problem of population growth in India had been a lively social issue for public discussion well before the country gained independence. Concern about population growth in India goes as far back as to 1891, when the Census Report invoked Malthus to contend that over population was responsible for Indian poverty (Mitra 1977). Subsequent Census Reports upto 1951 continued to repeat this theme. P.K. Wattal (1916) was among early exponents of this thesis. It is interesting that Ghurye (1938a), who headed the first department of sociology in the country in the Bombay University in 1924, was a lifelong crusader for birth control (Ghurye 1973 : 63-66). The All India Women's Conference advocated birth control as far back as in 1932 (Raina 1968) and the National Planning Committee of the Indian National Congress, set up in 1938, strongly supported family planning as a state policy (National Planning Committee 1949).

However, the Malthusian thesis was challenged by another school of social scientists. Radhakamal Mukherjee (1938), B.N. Ganguli (1938) and Gyanchand (1939) belonged to this school. They argued that overpopulation was only a symptom of the underlying malady of arrested economic progress during British rule. They wanted the state to play a positive role in promoting economic and cultural progress. At the same time they recognised the need for controlling population growth

through the generation of social and economic conditions conducive to the general adoption of methods of limiting the family size.

Recommendations of the famous Bhore Committee (Health Survey and Development Committee 1946) (Government of India 1946 : 483-89) on the problem of population in India mirror the contrary pulls of the two schools—the Malthusian School and the Socio-economic School. While it is forthright in recommending raising the legal age at marriage for girls upto 18 years and creating incentives for a small family norm through improvement of the standard of living, it had weighed the pros and cons of any specific action programmes to 'intentional limitations of families' to recommend 'the spreading of the knowledge of birth control as far as the limitations imposed by the peculiar circumstances of the country... will permit'.

After India gained independence, the balance shifted decisively in the favour of the Malthusian School and it continued to dominate the country for over a quarter century. The country became dependent on the United States, intellectually, politically and economically and it started receiving considerable technical assistance from it. The overtly Malthusian concern about India's population problem by the Harvard Group and the United Nations in the early fifties, referred to earlier, marked the beginning of a new trend in social science studies to bring about motivational manipulation of large masses of people of the country. Asok Mitra (1969) was among the first to ask for reversion of this trend and pleaded for the more balanced approach, suggested by the Bhore Committee. He emphasised that a steady rate of economic and cultural growth was more vital for a nation's prosperity than a small or diminishing rate of population growth. He felt that 'wholly unnecessary and harmfully rigid postures have been taken. Champions of economic growth have ignored the harmful effect of runaway population growth. Champions of population control have underestimated the utter necessity of economic growth. Few have stressed that economic growth and population control are two sides of the same coin.' Pointing out that to a very large section of population 'a fresh human stock is the only capital that can be

invoked', Mitra pleaded that urgent steps to improve their conditions should be an integral part of a family planning programme. Gunnar Myrdal (1968 : 2156-57) and P.B Gupta (1965) have been among those who had underlined the need for such a balanced approach.

Pursuing in the field of family planning the thinking he had developed in NTI, Banerji analysed the family planning programme as a complex system with multidisciplinary dimensions, and concluded that 'the greatest mistake in the formulation of the family planning programme has been to grossly overestimate the effectiveness of the "motivators". Motivation was considered to be some sort of a magic wand, which could be used by everybody to make anybody accept family planning, (Banerji 1971 : 31-35). Invoking the ideas of Mitra, Gupta and of Myrdal, Banerji pleaded for an alternative approach based on a deeper sociological understanding of the process of formation of felt needs for a small family norm in a community.

Later, while re-examining some of the basic postulates of the Khanna Study in the field, Mehmood Mamdani (1972) had pertinently observed that the survey of KAP did not attempt to understand the basis of the opinions themselves in their social context. Adopting this approach to data collection in some villages which had provided the study population of the Khanna Study, he concluded that no programme would have succeeded because birth control contradicted the vital interests of the majority of the villagers. As pointed out earlier, Srinivas and Ramaswamy (1977) and Ramakrishna Mukherjee (1972) have also emphasised the need for a deeper understanding of fertility behaviour of a population in its sociocultural context.

Another eminent Indian sociologist, A.R. Desai (1979) had gone a step further when he observed that it is the exploitation, poverty and degrading conditions of living which is responsible for rapid population growth. He advocated a genuine socialist path of development, based on social ownership of means of production to meet the assessed needs of the people.

By the early seventies the alternative approach combining family planning with socio-economic development had

received strong endorsement from a wide range of social scientists.

Asok Mitra (1974) continued to make major contributions in support of this approach. Ashish Bose (1974), P.B. Desai (1983), B.N. Ganguly (1974), P.C. Joshi (1974), A.R. Desai (1974), Subramaniam Swami (1974) and P.K. Bardhan (1974) are some other notable contributors. At the very same time it was becoming increasingly difficult to gloss over some of the basic inadequacies of the Malthusian approach.

Both these factors combined to bring about a major review of the then existing approach to population control in India. Responding to this trend of thought, the then Union Minister for Health and Family Planning, underlined the close relationship between population and poverty. Eradication of poverty was considered as a prerequisite for solving the population problem. These ideas provided the basis of the proposals for population control in the Fifth Five Year Plan of the Government of India (1980). Following that, the Government of India declared at the World Population Conference, held at Bucharest in 1975, that 'Development is the Best Contraceptive' (Singh 1975).

An interesting outcome of this new approach was the formulation of a new family planning communication policy (Government of India 1974). Unlike the earlier case, (see, for example, Banerjee 1979; Bhandari 1979), a good deal of academic work and detailed discussions were held to give shape to the new policy. The change of focus was both in terms of the messages and media. The messages were diversified to include availability of different ways of practising contraception, their advantages and disadvantages and institutions offering such services. It was also decided to combine these with messages concerning broader developmental issues, such as mother and child health, age of marriage, women's education and employment, social welfare schemes, and so forth. Choice of the communication media underwent changes to conform to the changes in messages and also to bring about a better coordination in increasing their outreach.

The unsuccessful bid to bring back the old Malthusian approach during the National Emergency (1975-77) led to further strengthening of the alternative socio-economic

approach. As a result of the devastating backlash, avoidance of coercion in any form and the synergistic relationship of population with development activities became the clearly recognised basis of the policies of the subsequent governments in India (Government of India 1979), (Government of India 1980), (Government of India 1981), (Government of India 1986).

Starting from the early concern of the Harvard Group and the United Nations, experts from foreign countries have generally been involved in promoting and strengthening a Malthusian approach to family planning in India. Lately, however, there had been a number of independent foreign scholars who had taken a contrary stand. Outstanding among them has been Nicholas J. Demerath, Sr. professor of sociology at Washington University at St. Louis, who has put across his views in a book entitled : *Birth Control and Foreign Policy : The Alternatives to Family Planning*. Demerath enjoyed the unique advantages of being a participant observer—he was a Ford Foundation Consultant Social Scientist for India's family planning programme during 1965-66, when the Malthusian approach was at its peak. This enabled him to present an insider's view of the activities of what he calls the 'Family Planning Establishment' in USA in relation to the Indian programme. He singles out seven major components of this 'Establishment' : the Population Council ; the Ford Foundation ; the Rockefeller Foundation ; the Population Crisis Committee ; the International Planned Parenthood Federation ; the US Agency for International Development ; and the Council on Foreign Relations. He identified obsession with technique (e.g. IUD), oversimplified approach to motivation, societal naivety, political impotence and weak management as the causes of the family planning fiasco in India. (Curiously, this Harper paperback soon disappeared from the market, and it has now become a collector's item). Another American scholar, Meredith Minkler (1977) carried out a field study to document the excesses committed during the intensive family planning drive at the time of the Emergency.

Scholars from Sweden have also made significant contributions in exposing the weaknesses in the family planning programme. On the basis of field work done in 1969-70, Djurfeldt and Lindberg (1975 : 204) tended to go along with

scholars like Mamdani in concluding that 'family size is less a result of blind sexual images than the most neo-malthusian tend to think, and more a result of planning and foresight'. These scholars have gone on to contend that the ideology of population control expresses the class interests the ruling classes. Intellectuals of similar persuasions have expanded this class perspective so that it has become an all encompassing ideology, which, masked by scientific theory, is capable of explaining everything. These two scholars have shown a remarkable foresight when they expressed the fear, along with lines predicted by Samir Amin, that failure of family planning programme would increase the dangers of fascist reaction. That exactly occurred later on during the Emergency.

Another Swedish scholar, Staffan Bergstrom (1982), carried out field work in 1978 to examine the proposal to launch the India Population Project-II (IPP-II) with financial assistance from the Government of India, World Bank, and Sweden. Pointing out that IPP-II had pronounced Malthusian overtones, particularly its proposal to 'generate demands for accepting contraception' through 'Information, Education and Communication' drives, he succeeded in arousing public opinion in Sweden to such an extent that it led to Sweden's withdrawal from IPP-II. Underlining the close relation of population and poverty, Staffan Bergstrom (1980), Lars Bondestam (1980), Erland Hofsten (1980) and Bo Gunnarsson (1980) have drawn attention to international forces which had tended to undermine the ideas behind the Bucharest Declaration at the global level and strengthen the Malthusian family planning programmes in a Third World country like India.

When, in 1964, Banerji left NTI to join in National Institute of Health Administration and Education (NIHAE), he wanted to extend the use of social science concepts and methods developed in NTI to wider fields (Banerji 1969). The family planning programme had already acquired a dominant position in the health services of the country. By that time, with the initiative and support of a very large number of consultant social scientists and health educators from abroad (mainly USA), enormous resources had been mobilised to bring about 'motivational manipulation' of the masses of the people to make them accept the contraceptive methods offered by the

family planning programme (Demerath 1976), (Rosen 1985), (Wyon and Gordon 1971). As mentioned above, Banerji had expressed himself categorically against the Malthusian approach, and he had pointed out gross shortcomings in the conceptualisation and implementation of the programme for extension education and mass communication (Banerji 1971b). On the basis of a field study started in 1972, he had shown (Banerji 1973c) that family planning programme, including the Mass Vasectomy Camps that were being conducted all over the country at that time, projected a very unflattering image among the people. The morale of the family planning workers was also very low. The study showed that it had not been possible to relate the programme with a very large section of the rural population : there existed a wide gulf between the programme and these people. The field work was still going on when the intensified family planning programme was launched during the period of National Emergency. The gulf between the programme and the people was observed to be widening rapidly (Banerji 1976), (Banerji 1977a), and many people perceived the drive as an open act of retribution against them (Banerji 1985a : 239-40). Based on the data collected from the different parts of the country, Banerji drew attention to the havoc caused by the programme (Banerji 1977a).

Pursuing his investigations, Banerji analysed the 1976 Population Policy of the Government of India (Government of India 1976), which among others, had a provision for allowing state governments to enact laws for compulsory sterilisation and enforcement of a wide range of disincentives for those who refused to limit their size. He also studied the role of foreign agencies and found support for his conclusions from the works of Demerath, Bondestam, Gunnarsson and others, referred to earlier.

Analysis of this aspect of sociology of knowledge - i.e. active efforts to generate knowledge to provide legitimacy to a Malthusian approach to population control—formed another new important area of contribution in the alternative approach.

The ideas developed from these studies logically led to the consideration of issues concerning the political economy of population control in India (Banerji 1980a). It was contended that the bogey of population growth was used as a convenient

alibi by the ruling class in India to explain away their failure to fulfil the promises they made in the Directive Principles for State Policy in the Constitution of India, e.g. universal primary education by 1960, good health and nutrition status, employment, land reforms, and so forth (Basu 1970). It also enabled them to put the blame on victims for their sorry state.

Finally, as their failure to meet the basic needs of the masses of the population was threatening the very existence of the social and political system, the ruling class unleashed an aggressive campaign against the masses in the form of an extensive birth control drive. Successive and rapidly escalating onslaughts on the masses in the form of launching of massive drives for motivational manipulation, use of manipulated knowledge to provide a cover of scientific respectability to class oppression, holding of Mass Vasectomy Camps, implementation of the intensified sterilisation campaign and moves to enact laws to enforce compulsory sterilisation of the people during the National Emergency, are parts of this campaign (Banerji 1985a : 174-76).

A remarkable feature of this analysis of the political economy of population control is that, reacting to this oppression, the masses of the people have made use of the limited democratic rights they had wrested from the ruling class to overthrow the tormenting government (Banerji 1980a). The lesson went home, and the succeeding government, and the latter's successor too, made a policy commitment to make family planning an entirely voluntary programme and that, at least on paper, family planning was accepted as a part of a larger package of socio-economic development programme of health, nutrition, water supply, sanitation, education, improved status of women, and so forth (Banerji 1985a : 177-78). It thus turned out that in threatening the stability of the social and political system through population growth, the oppressed people of the country had found a potentially powerful weapon to wrest more democratic rights from their oppressors.

As an alternative, following the ideas developed at NTI, Banerji suggested that the family planning programme be built on a foundation of sociological data on response of the people to the population problem (Banerji 1971b : 70-74), (Banerji 1974), (Banerji 1969), (Banerji 1976), (Banerji 1980a), (Banerji

1985a : 403-06). In fact it was discovered in the course of his field investigations, referred to above (Banerji 1973c), that a sizeable proportion of the population had indeed a felt need to limit the size of their families and that, because of limitations in the outreach of the organisation, programmes were unable to fully meet these felt needs. It was also contended that after developing the outreach to meet the pre-existing felt needs, additional felt needs could be generated through better services to improve health, nutrition, education, employment, status of women, promotion of local self-government, etc. Banerji had also advocated the use of an operational research approach to blend the social science contributions with other managerial and technological issues to formulate and implement the suggested alternative (Banerji 1972), (Banerji 1969).

Thus, to sum up, among the countries of the world, India's experience with family planning stands out distinctively in several ways (Banerji 1985a : 176). In no country has family planning occupied so dominant a position for so long a period. As India had a large population, it has been a massive programme. There has also been a massive involvement of social scientists in this programme. The fact that there have been conspicuous failures in all the major initiatives taken in this programme—e.g. clinic approach, extension approach, IUD popularisation, mass communication drives, target orientation, Mass Vasectomy Camps, and the intensified drive during Emergency—has provided evidence of many inadequacies and shortcomings in the concepts and methods of the conventional (Western) models of social sciences, health education and mass communication that have been used in the formulation of these initiatives.

A remarkable outcome of the deep national concern for the population problem is the growth and development of a predominantly endogenous alternative social science approach to the problem. Indeed, this led to the formation of an alternative framework for developing social sciences and for education and training of social scientists in the country (Banerji 1985a : 306-16).

Calling into question the Malthusian approach, social scientists like Gupta (1965), Myrdal (1968) and Mitra (1969) have been among the first to underline the importance of

relating the family planning programme with the programmes for socio economic development. This had opened up fields for elaboration of the alternative social science ideas developed in the course of formulation of India's National Tuberculosis Programme—e.g. felt needs and epidemiologically assessed needs, health culture, people-oriented technology and application of the approach of operational research for programme formulation. It also opened up important areas for study of sociology of the knowledge base of a development programme and sociology of foreign technical assistance in social sciences, demography, health education and mass communication. Study of social phenomena in an historical perspective and analysing them in the context of their political economy has been a high point in the effort to develop an alternative social science approach to study the problem of population growth in India.

It may be emphasised once again that while the family planning programme offered a very wide scope for growth and development of the alternative social science concepts and methods developed earlier at NTI, it has merely been an episode, undoubtedly an important and a major episode, in the process of formation of the alternative. This process has an internal dynamic of its own, which is rooted in the growth and development of the socio-cultural processes in the country. The ideas had their own momentum and in the course of time, it has influenced many other areas in the health field. In other words, such alternative ideas could not have been developed had there been no interplay of wider social and cultural forces within the society. The family planning programme was a mere vehicle to channel these forces.

Health Behaviour Studies

To give a broader data base to the ideas developed at NTI, Banerji had undertaken a major study of health behaviour of rural populations in different regions of the country (Banerji 1982a). This study has been referred to earlier on many occasions. In designing this study, he had called into question the concepts (and methods) governing the conventional social science studies in health fields in India.

The conventional studies were considered to be techno-

centric. They were obviously value loaded. Western medical technology was considered as something good and desirable for the rural population of the country. In the thinking emerging from the conventional studies, the task of social scientists and health educators was to overcome ignorance, superstitious beliefs and practices and other such cultural resistance of rural people to the acceptance of Western medicine handed down to them by the programme organisers. It may be recalled, S.K. Dey, the founder of the community development movement in India, had also reacted very strongly to this approach in the 1956 Conference on Social Sciences (Government of India, 1957). Some social scientists also wanted adjustments in Western medical practices so that they fit better with the cultural and social background of the population. Banerji adopted a basically different conceptual and methodological approach in carrying out his study of health behaviour.

Conceptually, health behaviour was considered to be a mere component of a wider cultural complex (Health Culture) which includes the various health problems generated by the prevailing ecological conditions and cultural response to these problems in the form of their perception and meaning and in the form of practices and institutions that are developed by the people themselves to cope with the problems. Community health services that are made available from outside are considered as purposive intervention in the health culture of the community with a view to more effectively alleviate the suffering of the people due to health problems. There were thus four key issues around which the methodology of this study was formulated :

1. Instead of starting with data collection on response of people to a pre-determined technological approach, here the start was from the people themselves : what do different sections of people do when they encounter different health problems ? what do these problems mean to them ? what problems do they encounter in acquiring access to various kinds of services ? to what extent are they able to alleviate their suffering by adopting different types of health practices that are available and accessible to them ?

2. Behaviour of different individuals, belonging to different strata of a community, was studied in relation to the entire

spectrum of health problems encountered by the community: from the very minor problems to the very major ones. Health problems related to mothers and children, various types of communicable diseases, nutritional problems, injuries and accidents, occupational hazards, mental health problems and family planning, are some of the major health issues included for this study.

3. Response of different individuals to the wide range of health problems was studied in relation to the availability of and accessibility to a very large variety and a large number of institutions within the community or outside—e.g. government and private health institutions of Western or indigenous systems of medicine, other healers, practitioners of folk medicine and home remedies.

4. The dynamics of the entire cultural complex (health culture) was analysed in terms of dynamics of the wider cultural setting, which, in turn, was influenced by the modes of production, structural and other social and political processes.

This required collection of considerable data with investigators living in villages doing anthropological field work and collecting quantitative data, using schedules. Qualitative data on the issues demarcated above were collected by investigators through direct observations, depth interviews and case reports. There was considerable cross checking of the data. An unstructured schedule was constructed on the basis of identification of some important quantifiable variables from the qualitative data. This was used to give quantitative dimensions to the qualitative data. Such an elaborate study was conducted in nineteen villages, located in eight states of the country. The village selection was purposive—a well-staffed Primary Health Centre (PHC) was located in eleven of them, seven were within five kilometers of a PHC and one was deliberately chosen because it was one of the remotest villages from the PHC—at a distance of sixteen kilometers. Each one of these nineteen villages was revisited by investigators a number of times over a nine year period (1972-81).

This large scale study, spread over a long time span, generated a considerable volume of data on a very wide range of issues. From the data that have already been processed it has

been possible to develop a number of ideas. Reference has already been made to data concerning to (a) image of the family planning programme, (b) unmet felt need for family planning services, (c) community response to the intensified family planning drive during the Emergency and (d) an anthropological analysis of the problem of rural poverty and hunger with a view to developing new perspectives for measurement of undernutrition and malnutrition and its formidable cultural, biological and political implications.

The data on health culture of the study population provided considerable support to the ideas developed at NTI. Taking into account the social and economic status of the people, epidemiology of the health problems and the nature of health services available, it is not surprising that problems of medical care were by far the most urgent concerns among health problems in rural populations. But the surprising finding was that the responses to the major medical care problems was very much in favour of Western (allopathic) system of medicine, irrespective of social, economic, occupational and regional considerations. Availability of such services and the capacity of patients to meet the expenses were the two major constraining factors. The demand for Western medicine was so strong that whenever people were unable to get access to qualified persons, they created a market for a new type of a healer—the socalled Registered Medical Practitioners (RMP) (Banerji 1973c). Most of the RMPs are poorly educated and trained, but by learning to make use of certain well-known drugs to deal with at least some of the health problems of the people, they have carved out a place for themselves. The response was similar in the case of maternal and child health roblems. Even in cases of preventive services like insecticide spray or immunisation and vaccination, obstructions due to lapses of patients appeared to be very small when compared to the lapses of health workers and health organisations. In retrospect, the belief in Sitala Mata, which was used so frequently to explain away the earlier failures to eradicate smallpox (Basu 1979), (Gupta 1965), appears now to have been exaggerated out of all proportion. One is tempted to ask: did the administrators employ social scientists to invoke the name of Sitala Mata to cover their own failures to organise a good smallpox eradication programme?

Indepth study of poverty conditions and of the processes which generate such conditions had also provided the data base for making a more detailed analysis of linkages of poverty with the ecological conditions, health problems, health culture and access to health services.

Biologically paraphrased, poor people are those who are on the losing side in the struggle for existence. Among those on the losing side are many who have been totally wiped out—they have died in their struggle for existence. Those who are not wiped out but, somehow manage to cling to their lives, form a significant segment of the poor for many reasons. The most ominous among them is that they have managed to survive under very adverse conditions, earlier considered incompatible with human survival. Due to factors not yet fully understood, it is apparent that the 'floor' for biological survival of a human being has been lowered and because of this he has acquired higher longevity. But survival has become more precarious, and this has drawn these human beings even nearer to a vegetative existence. They have become much more vulnerable to manipulation and control by those who have pushed them down in the struggle for existence. And it is only a perpetuation of misery, and not life, when some of the weak children borne by grossly malnourished mothers manage to survive the myriad hazards of life.

The study has thus provided data on various aspects of the most overwhelming health problem faced by rural populations in India : the problem of hunger. Poverty also leads to further disintegration and deterioration of the environment and of living conditions —of sanitation, of the quality of drinking water, of shelter, of clothing and being forced to eat wild roots, grass seeds, leaves and even crumbs thrown in the garbage.

One of the most pernicious and potentially most dangerous consequences of extreme poverty is that it tends to numb the senses of the victims—it is just like the numbness due to destruction of nerves in leprosy. A highly anaemic, grossly malnourished and undernourished woman, who carries all sorts of infections, still thinks she is 'normal', because that is the sort of life she had been living for as long as she remembers. Why, her parents also lived such a life. In a setting such as this, getting enough rice to eat, may be with a piece of fish or meat,

is abnormal, or more precisely, a windfall. The children exclaim at the 'sweet' smell of gluey rice that is boiling in a brimless aluminium pot.

However, quite apart from what can be called 'diseases of poverty', which have become a 'normal' part of their 'normal' lives, diseases also strike them in the form of medical catastrophes, and these strike them more often than they do other groups. Obstruction of childbirth or severe bleeding during childbirth, the husband unable to earn his wage because of prolonged typhoid fever, the adolescent girl constantly crying out in acute agony because of extensive inflammation of the eyes and various forms of serious injuries sustained as a result of accidents or assaults, are examples of such medical catastrophes. Worse still, the poor are in a most disadvantageous position in facing such catastrophes. They are physically weak. Loss of wages due to sickness has profound impact on the economy of the entire household. Besides, they are not articulate—they are illiterate and ill-informed with no money to approach private practitioners or to bribe government officials or to buy the prescribed medicines or meet the cost of transporting the patient to a health institution. They can exercise little 'influence' on officials because they are low down in the power hierarchy of the community. In a desperate bid to avert such catastrophes, they fall prostrate before the hated landowner or the moneylender or the unscrupulous political boss, and they readily agree to the terms dictated and thus barter away whatever power they possess. This, incidentally, shows how fallacious are assessments of social scientists in ascribing a place for health needs in the hierarchy of the needs of the people. When people face no medical catastrophes, health needs may be found low down in the so-called hierarchy of needs; but when there is a medical catastrophe, it becomes not simply a top priority, but a crash priority among the needs of the people. This also provides an example of how fallacies in the methodology lead to vital fallacies in the concepts.

Thus by having control over medical services at the time of a medical catastrophe, the exploiting, privileged class uses this as a weapon to control and exploit the poor. Because of its own privileged-class-orientation, the medical establishment

also ends up strengthening the privileged class by helping the latter to deal more effectively with the (fewer) health problems it has to encounter while, at the same time, it weakens the under-privileged, by denying them access to medical institutions even when they encounter (more frequent) medical catastrophes.

This study has also provided ample data to dispel any notion that the overall atmosphere among the poor in rural India is that of unrelieved doom and gloom. The unjust and oppressive social and economic system is going through one crisis after another. Rising population growth, failure of the forcible sterilisation drive, internal contradictions within the ruling class and increasing assertion by the poor of their rights, are the major factors which are precipitating the series of crises. This has forced the ruling class to make several concessions to the poor in social, economic and political terms. In turn, these concessions have inspired the poor to demand more: more democratisation, greater social justice and higher return from their labour. Data from the nineteen villages for the entire duration of time makes it very clear that there is considerable ferment in rural areas. There is demand for minimum wages for agricultural labour, for houses and social security; there have been demonstrations before a PHC to demand better performance by the staff; there are demands from Mahila Mandals for family planning services; and, there are widespread demands for a better deal for the poor in general and for Harijans in particular.

The findings on the dynamics of social and cultural change, based on retrospective and prospective study of the relationship between caste and class, the power structure and the ongoing political processes, apart from their intrinsic importance as data on social dynamics in rural India, also provided a basis for analysis of some of the key decisions in the field of health services. The decision to consider development as the best contraceptive (1975), launching of the intensified family planning programme of Emergency, analysis of population policies of 1976, 1977 and 1981 (Banerji 1985a: 176-80), decision to entrust people's health in people's hand and the National Health Policy of 1982, reiterating commitment to bring about radical changes are some of the outstanding examples. These data are also of considerable value in studying the political

economy of health (including primary health care), nutrition and population control in India.

In the 1980s some scholars from Western countries had also developed a refreshingly new perspective for social science studies in health field in India. Djurfeldt and Lindberg (1975 : 216) conducted a study of introduction of Western medicine in the village Thaiyur in Tamil Nadu in 1969-70 and concluded that as 'the health situation in the village was consequence of the prevailing economic and political order, both the Western and indigenous systems of medicine are equally impotent in dealing with the health situation ; and only a profound transformation in the economic and political structure can give the people of Thaiyur the means to improve their health. Reference has also been made in Chapter 6 to another Tamil Nadu village was studied by C.M.E. Mathews (1979). She concluded that some of the apparent contradictions in the behaviour of villages may be explained by cultural deprivation.

In a study of yet another group of Tamil Nadu villages, Sheila Zurbrigg (1984) has looked at continuing ill-health in India through the life of a labouring village women, exploring the forces which keep her from adequately feeding and caring for her children and herself. She advocates a shift of attention and efforts of health workers to the poverty-dependency-ill-health dynamics, and suggests how issues of ill-health can be used to strengthen the broader struggle by the labouring poor for health and social justice.

Research students at the Centre of Social Medicine and Community Health of Jawaharlal Nehru University have also conducted some significant studies. Studying six Oraon tribal communities living at varying distances from the sophisticated hospital at the steel plant at Rourkella, Santosh Kumar Sahu (1980) had observed that changes in the access of Western medical services had profoundly changed the other components of their health culture. Furthermore, he found considerable degree of unmet felt needs for Western style medical services even in the remotest Oraon village and that when medical catastrophes strike them, they are prepared to make great sacrifices to gain access to practitioners or institutions of Western medicine.

Studying the interaction between the people and Integrated

Child Development Scheme (ICDS) in a tribal block in Orissa, Santa Raye (1982) observed that many of the major shortcomings in the implementation of the ICDS could have been avoided had the organisers developed a people oriented programme, instead of imposing a pre-determined package of services on the people.

Conducting a community study as a component of analysis of the National Leprosy Control Programme (LCP) in Chingleput District of Tamil Nadu as a system, K.V. Rao (1982) found that perception of stigma in a community is confined mostly to those cases who had developed deformities. Cases develop deformities because they are not diagnosed and treated during the long pre-deformity phase to the disease, quite often due to lapses in the implementation of the LCP. Also, carrying out a study of treatment behaviour along the NTI lines, Rao demonstrated that in the case of LCP also, failure of many patients to continue the prescribed treatment could be due to inadequate epidemiological analysis in defining a case and to inadequacies in the implementation of the programme.

Bringing together the social science ideas developed in leprosy, tuberculosis and other fields, Banerji has attempted to build a framework for an alternative comprehensive social science approach to study of community health programmes (Banerji 1984a).

CHAPTER 12

New Approaches to Manpower Development and Hospital Administration

Health Manpower Development

Analysis of the social, cultural and political forces which have contributed to the making of a physician in India since the early colonial period and how these have influenced the development of health services during this period is an important area for social science studies. As in other instances, this analysis led to identification of two opposing directions of development. One is based on the interests of the ruling class, during the colonial and post-colonial periods, which had tended to alienate the physicians and the health services from the masses. It is this trend which is responsible for what the Statement on National Health Policy (Government of India, 1982) has described as 'almost wholesale adoption of health manpower development policies and establishment of curative centres based on Western models which are inappropriate and irrelevant to the real needs of our people and the socio-economic conditions obtaining in the country'. Abolition of the three-year licentiate course in medicine and the rapid expansion of medical education in the immediate post-colonial period, the relative neglect of training nurses and other auxiliary workers, the phenomenon of brain drain of physicians and the earlier insistence of the Medical Council of India to conform to the standards laid down by the General Medical Council of Great Britain (Banerji 1973b), are some of the main consequences of influence of forces which favour the ruling class.

The other direction of development has its roots in the forces unleashed by the anti-colonial struggle and the democratic struggle of the masses during the post-colonial period. Emphasis on a social orientation of medical education to produce social physicians by a succession of high powered committees (Government of India 1975) and by the Medical Council of India (1982), has been the outcome.

One consequence of the emerging contradiction has been that over a time span of four decades, there has been a significant expansion of the network of rural health services and substantial increase in the allocation of funds for this purpose. The ruling class has also been compelled to promise to entrust 'people's health to people's hands' through community health workers chosen by people themselves.

Sociologically, this is an important event in health service development in the country. The political leadership was impelled by the people to take a decision to bypass the entire medical establishment and go directly to the people to strengthen their capabilities to cope with their own health problems. Another aspect of the sociological relevance of this decision lies in the fact that it was the result of the contradictions that emerged as a result of a strong popular resentment against the excesses committed on people during the intensive sterilisation drive of 1975-77 (Banerji 1978).

While the decision to implement the Community Health Workers' Scheme on a nationwide scale can be regarded as a major achievement of the masses, it was also apparent at that time that the nature of the social structure and the distribution of power in rural areas would be incompatible with such a programme for democratisation of health services (Banerji 1978). It was also anticipated that because of its class character, the medical establishment will also lag behind in performing its roles in identifying health activities that could be entrusted to people themselves, in providing the needed quality of training and in offering the needed support to the community and to community health workers when they encountered more complicated problems (Banerji 1978). Bruno Jobert (1985) and Imrana Qadeer (1977) had made a social analysis of this programme and expressed similar views. Later, Qadeer (1985) had conducted field work in Madhya Pradesh to demonstrate

the incompatibility of this Scheme with the power equations and social relations and the quality of health services obtaining in rural areas.

It was, however, pointed out by Banerji that even the facade of the people oriented health service system offers valuable opportunities for exerting pressure for bringing about democratisation of health services and for the wider political struggle for improving their health status (Banerji 1978).

From the standpoint of manpower development for health services, starting from the people requires a new approach. The starting point is a health service system where the socio-cultural data concerning the people provide the basis for identification of a package of technology and a system to deliver it to the people and where people themselves offer an important source for manpower—in the form of their own mechanisms for self-care, practitioners of the traditional systems of medicine and their own representatives serving as community health workers. The requirements of the health system will determine the number, the type and the quality of the personnel needed to provide referral support to the people. This will cover a wide range of personnel, starting from auxiliary health workers and continuing with ascending grades of physicians, nurses and other professionals. WHO has termed this approach as health system research for health manpower development (HSMD) (Fulop and Roemer 1982).

A crucial element in the manpower needed will be socially sensitive community health physicians—physicians who possess the epidemiological, managerial, social and political competence. They are termed as Managerial Physicians (Banerji 1985a : 400-01).

This also underlines the need of a new type of social scientists to work in health fields. First and foremost, they are required to have social science competence which is tuned to the socio-cultural and political conditions prevailing in the country (and not tied to the Western reference frame). They are also required to have competence to work as equal members of interdisciplinary teams to make social science contributions to health service development, to education and training of health workers and to the implementation and evaluation of health services.

Hospital Administration

In the new relationship between the people and medical technology visualised in the Alma Ata Declaration, the traditional roles of hospital need drastic changes, both in the internal functioning of hospitals and in their relationship with the community (Banerji 1981). Traditionally, they have been inward looking, urban and privileged class oriented, mystifying medicine and serving the market forces by promoting use of high technology for the few (Taylor 1981). While remaining centres of education, research and high quality of services in which specialists retain their high status (Mahler 1981), hospitals are expected to be totally identified with the other health services in developing an epidemiological approach to the community health problems. This is best accomplished by relating to the health culture and felt needs of a community and by responding to the forces of democratisation within it (Banerji 1981a). As progress is made in this direction, it will be possible for a hospital to gain confidence of the community and may even be in a position to initiate changes within the community and promote more effective use of the services provided by it (Banerji 1981a). This opens up new fields of work in hospital administration for social scientists.

However, these activities should not obscure the fact that social scientists are required to play an important role in improving the functioning of different types of hospitals in the country (Banerji 1984b). A hospital consists of a technological system and a social system. Obviously, hospitals in India will differ fundamentally from those of Western countries because of differences in the culture, social structure, epidemiological situation, economic status, manpower development, overall health policies and programmes, and so forth. The responsibility of social scientists who work in the field of hospital administration will thus be basically different. To fulfil these responsibilities, they will have to acquire competence to study a hospital as a complex social system, which interdigitates with the highly complex technological system with the objective of alleviating the suffering of the people.

CHAPTER 13

Some Other Political and Social Issues

Formulation of Alternative Health Service Systems

Commenting on the policy formulation in health, Banerji has pointed out that, more often than not, the verbal commitment of the political leadership to democratisation is a mere diversionary tactic to head off popular pressure (Banerji 1977b). It is also very likely that under such political conditions, formulation of an alternative health policy, however scientific and relevant, becomes at best a mere academic exercise. Nonetheless, even an academic exercise can become an useful instrument for putting pressure on the ruling class to bring about the desired political change by offering a concrete, well-thoughtout alternative policy. It can in any case serve as a blueprint for action when political changes finally take place. A campaign for active promotion of people-oriented alternative health care policy and programme thus, in fact, becomes a potent tool for pressing for change in the political system.

Once the political potential of a concession made by the ruling class is properly understood, the next logical step is to mobilise the technological resources needed to transform the facade into a reality (Banerji 1978). How to ensure that, even under existing constraints, health services become accessible to the masses of people, so that its use as a weapon of oppression to minimised?

This is the challenge before socially conscious community health physicians. Recognition of the potential of health service development for promoting democratisation and of preparation of suitable conditions for developing an alternate people

oriented technology requires that political workers and socially conscious interdisciplinary teams of health workers work together to take advantage of the commitment of the ruling class to health service development.

Banerji has emphasised that formulation of alternative health service system demands ending of dependence on commercial elements that have so heavily and extensively infiltrated in the Western system of medicine (Banerji 1985a:387). Considerable innovative talents are also required to devise alternative technologies and health care delivery agencies which are in consonance with the available resources, epidemiological characteristics of the problems and the cultural and social setting of the population to be served. Meeting those felt needs of the people, which happen to coincide with epidemiologically assessed needs, receives top priority in such a framework.

While it is now being gradually realised that it is unrealistic to expect improvement in the health status of the people without appropriate political, economic and social action, it is often overlooked that efforts to relieve the suffering caused by health problems can, in their turn, contribute to initiation of such action. First, as has already been pointed out, the very alleviation of suffering has political significance, because it reduces the disadvantage of the masses and thus increase their fighting capacity. Consequently, the masses are in a somewhat better position to wrest their rights from the ruling class. Second, such an alternative can provide an entry point for change agents, who can use the opportunity to work with the people to initiate changes in other social and economic fields. It may also prove to the people that they can, by their own efforts, create better conditions for solving their health problems. Thus, by generating social awareness, it may serve as a lever for promoting similar developments in other fields. In short, it has the potential to initiate a chain reaction which will help the exploited to win their rightful place in society.

Some Specific Areas

Nutrition Studies: Reference has already been made to aspects of political economy of health and health services (Banerji 1978d) and of population control (Banerji 1980a).

This approach has also stimulated interesting discussion on the critical question of measurement of undernutrition in the country. In attempting to measure poverty in terms of the calorie consumption that is possible within the purchasing capacity of people, economists and nutritionists had to relate the problem of undernutrition to the political and social forces which determine the purchasing capacity. The problem of undernutrition is thus essentially an economic and a political problem, rather than one conventional public health or nutrition administration.

Such an analysis gives a different perspective to aspects of experimental, clinical and epidemiological research in nutrition. It was pointed out that there has been a sustained shift away from study of problems within individuals in communities to studies in clinical wards and research laboratories, including animal houses (Banerji 1978). It is this trend which had led to many unsubstantiated concepts regarding protein needs, superiority of animal proteins, essential aminoacids, trace elements, vitamins and tonics. It turned out that many of these concepts had been actively promoted by food and drug industries, from within the country and abroad, to generate market for their products. Why is it that while nutrition scientists and educators had been so enthusiastic about so many patently unsubstantiated and unscientific programmes, but they took such a long time to discover such an obvious fact that by far the most important nutritional problem in India is calorie deficiency (Gopalan and Narsingarao 1975), (Sukhatme 1978) and that diversion of the meagre resources of the poor to pay for the nutritional products of the drug firms actually exacerbates the condition of malnutrition?

An extreme but also a very alarming facets of such political subversion of medical knowledge can be found in the *creation* of the idea that severe malnutrition due to brain damage (National Academy of Sciences 1973). As pointed out earlier, from a scientific stand point, there has never been a convincing evidence to support this idea (Banerji 1978). Yet, presumably because of its political potential, in the late sixties, some eminent nutritionists from different countries, with full backing from their followers from the Third World, managed to generate intense pressure in favour of this idea on a global scale (National Academy of

Science 1973). The Secretary-General of the United Nations of that time (United Nations 1965) was moved to appeal to the Member States for immediate action to fill what was then termed the 'protein-gap' and avert impending disaster of permanent brain damage to millions of undernourished children in the Third World. If these premonitions were true, there ought to have been millions of mental cripples among various age-groups, scattered all over the affluent world. These alleged mental cripples would have been constituted by those who were exposed to severe early childhood undernutrition, say, during the World War I and around the Russian Revolution, during the Recessions and during the World War II, in various concentration camps and elsewhere. Proponents of the mental retardation theory have not been able to produce any evidence that this actually is so.

Perhaps the most deplorable aspect of these so-called scientific studies is that here it is presumed that intelligence tests really measure intelligence: such an assumption is particularly tenuous when such tests (however 'culture-free') are used on children who are socialised in the Third World.

Banerji had pointed out the far reaching political implications of such so-called scientific concepts in a Third World country like India: the ruling class may use it to brand large masses of people as mentally retarded and condemn them and the generation to come to live lives of 'hewers of wood and drawers of water' (Banerji 1981c). The fact that this concept is still being kept alive by some nutritionists (National Institute of Nutrition 1983), shows how strong has been the influence of those who manufactured such 'ideas'.

Malaria Control: Harry Cleaver's perceptive paper on the political economy of malaria decontrol in India (Cleaver 1976) reflects a refreshingly new type of social science scholarship in health fields in USA. According to him, much of the efforts which contributed to the development of public health, including malaria control, could only be understood as part and parcel of interplay of social conflicts attendant upon economic growth and development. Setbacks suffered by India's malaria programme because of stoppage of supply of insecticides in the wake of its conflicts with Pakistan provide strong support to Cleaver's contentions (National Malaria Eradication Programme

(1976). Another US scholar, Richard Brown (1976) has marshalled data to contend that the Rockefeller Foundation programmes in the Third World were not devoid of politics. They were loaded with political and economic values and consequences. Interests of the native population were assumed to be identical to the interests of business corporations.

Demographic Changes in Kerala : It is also interesting to note how an eagerness to 'prove' a particular point had put the studies of the important demographic changes in Kerala out of focus. In their enthusiasm to emphasise some social factors as the causes (Paniker 1983), (Eckholm 1977), it was overlooked that, despite the very hopeful demographic changes, large proportion of the people of Kerala live a very unhealthy life—for example, they are hungry, they suffer from a large number of communicable diseases and they live under highly unfavourable environmental conditions.

Maternal and Child Health : Study of political economy of health of mothers and children (MCH) also helped in acquiring a deeper understanding of these problems (Banerji 1985a : 280-81). In this context maternal and child health is essentially a function of human ecology : issues such as poverty, water supply and sanitation, nutrition and housing profoundly influence the health of mothers and children and the programmes for dealing with them. For instance, that a mother has to go out and work as a wage labourer, leaving the two-month old child under the care of his five-year old sister, has profound implications for health of her child and of the mother herself. In her report to the Sub-committee on National Health, Lakshmibai Rajwade (National Planning Committee 1948) had pointed out the disastrous consequences of colonial exploitation and plunder on the health of mothers and children.

Indigenous Systems of Medicine : As pointed out in Chapter 4, in the same report (National Planning Committee 1948) Abdur Rehman has analysed how because of the British rule the indigenous systems of medicine got isolated from the international mainstream and were neglected because these systems 'fell from the graces of the state and the powers that be'.

In ancient India it was realised that the effectiveness of a

physician laid in his understanding of the laws inherent in nature, which governed both men and nature and emphasised their identity. The interaction between body matter and environmental matter determined the state of health and disease. In the mid-nineteenth century, the famous German physician Virchow (Rosen 1958 : 254-58) had considered medicine as a social science. This line of thinking was subsequently pursued by scholars like Rene Sand (1952), John Ryle (1948), John Grant (1963), Henry Segerist (1961), (1943), Rene Dubos (1959), Iago Galdston (1954), Walsh McDermott (1969) and Thomas McKeown (1965), (1971). Interestingly, the Bhore Committee was very impressed by the impact of the Russian Revolution on the health service development in that country. Presumably influenced by the ideas of John Grant and Henry Segerist, it had emphasised the importance of social, political and economic determinants of health and health service development in India.

Sociology of Conventional Social Sciences in Health

There are also interesting facets of the sociology of conventional social science studies in health fields. From the description of the conventional social science studies in health fields, given in Part Two, it appears that the political leadership and health administrators of the country sought to create an aura of social legitimacy for their lop-sided health service development by getting some ill-defined or often not very relevant social, cultural and psychological issues raised by social scientists and health educators (Banerji 1975).

Dutifully responding to the 'need', social scientists raised such value loaded issues as modernisation and traditionalism and urban culture as opposed to folk culture. Such issues could be used to justify the urban privileged class orientation of health services in the country on the grounds that the backward, superstition ridden, uneducated and ignorant villagers have first to be properly educated and motivated by a corps of well-trained health educators from cities on the virtues of modern health services (Banerji 1976).

New Trends in Health Social Sciences

Ivan Illich (1977) has been among the first to point out some of the undesirable aspects of practice of Western medicine—e.g. iatrogenesis, professional control through medicalisation of life and dependence creation. M. Foucault has referred to the expansion of the 'clinical gaze' of physicians (Foucault 1973). Elaborating these ideas, scholars like Valentina Borremans (1978), Lowell Levin (1977) and John McKnight (1978) have pleaded for a positive approach, with emphasis on health promotion on the basis of deprofessionalisation and demedicalisation of life and increasing the coping capacity of a community by encouraging self-care.

Ray Elling and his colleagues (Elling and Keri 1974), (Elling 1971), (Elling and Lee 1966), (Elling 1978), (Elling and Sokolowska 1978) have made significant contributions by making comparative studies of health systems in different societies on the basis of social, cultural and political analysis. Apart from Harry Cleaver, Richard Brown, Djurfeldt and Lindberg, whose works have been referred to earlier, Vicente Navarro (1976), Raymond Illsley (1980), L. Doyal (1979), Imrana Qadeer (1975), Oscar Gish (1976), Meredith Thurshan (1981), A.A. Keilman (1975) and H. Deppe (1976) are some those who have discussed aspects of political economy of health and health services in different contexts.

A group of concerned health activists in India have launched a quarterly journal, *Socialist Health Review* (Editorial 1984), to promote their ideas. Radhika Ramasubban (1980) and Roger Jeffery (1979) are among those who have studied aspects of history of the modern health services in India.

CHAPTER 14

Foundations of Health Service Development

As opposed to many conventional social scientists, who had obtained social data with a view to manipulating people to make them accept whatever is handed down to them from 'above', scholars like Djurfeldt, Lindberg, Zurbrigg and Mathews, had 'gone to the people and learnt from them'. Because of this process of learning, they have opened up new dimensions for social science studies in health by raising such issues as economic and political origin of community health problems and how these considerations are crucial to solution of the problems, the struggle for health as a part of the broader struggle for social and economic justice and the important effect of poverty on health and culture. Reference has also been made to observations of many scholars on issues concerning the political economy of health, health services and family planning in India.

Earlier, while working on similar lines in conducting social science studies in NTI, Banerji had also raised a number of conceptual social science issues which till then had not found any place in the body of knowledge of conventional disciplines of medical sociology, medical anthropology, medical psychology or health economics. For example:

1. When the sociological study showed presence of considerable degree of unmet felt need for services, why is it, he asked, that the earlier social studies had emphasised use of mass radiography and it was assumed that the bulk of tuberculosis cases were 'unknown'?

2. Why is it that inspite of acceptance of the felt need oriented National Tuberculosis Programme (NTP) by the Union and state governments, there has been such a slow progress in

meeting the felt needs of the people? Why is it that exaggerated estimates were given about the problem of treatment acceptance and of development of drug resistance in implementation of NTP? Why is it that tuberculosis specialists continue to diagnose cases solely on the basis of radiological investigation when its poor reliability is so well established? Why is it that professors of phthisiology in medical colleges are still ignorant about the scientific studies which led to the formulation of the NTP and they still cling to the outdated and unscientific ideas? Why have many social scientists continued to ignore the studies conducted at NTI?

3. Finally, if there is so much of resistance to the NTP, why is it that the Government of India should have established the NTI in the first place and given it the mandate to develop a nationally applicable, socially acceptable and epidemiologically efficacious tuberculosis programme for India? Why is it that Halfdan Mahler and P.V. Benjamin got such a sympathetic response to their ideas from Rajkumari Amrit Kaur, then the Union Health Minister and from Prime Minister Jawaharlal Nehru?

Examination of such questions led to the development of the hitherto neglected political and historical dimensions of health and health services development in India. It turned out that the apparently innocuous and simplistic study of known and unknown cases of tuberculosis (Sikand and Raj Narain 1957) in a community was in fact not so innocuous and it was of considerable value to certain international market interests. By the late fifties, when this study was published, there has been a sharp fall in the demand for mass radiography units in Western countries, because there was a sharp fall in the incidence of tuberculosis. By raising the bogey of 'unknown' cases, the authors estimated that India should acquire as many as 3000 mass radiograph units to 'catch' the unknown cases in the country (Sikand and Raj Narain 1957).

Analysis of the causes of resistance of tuberculosis specialists to certain well established scientific data led Banerji to relate it to the class structure of the population of the country. The medical establishment was considered very much a part of the ruling class and it has a vested interest in resisting community orientation, demystification, decentralisation and acquisit-

ion of social control over medical technology. In this context, it is also interesting that in spite of the class orientation of the political system and its health establishment, the political leadership had been impelled to adopt NTP for national implementation. This had to be done in order to contain the forces of democratisation among the masses. Furthermore, despite strong resistance, the ideas behind the NTP are being increasingly accepted, so much so that, because of demystification of knowledge and decentralisation of the services, tuberculosis as a medical speciality has fallen very steeply in prestige and financial ratings.

The roots of this struggle of the masses for democratisation goes back to the anti-colonial struggle or the National Movement. To mobilise the masses with them, the political leadership had to make promises to build an egalitarian society in free India. When, after India gained independence, because of the pressure of class interests, the political leadership wanted to go back on the promises it made to the masses during the anti-colonial struggle, the anti-colonial struggle took the form of struggle for democratisation and, as pointed out Djurfeldt and Lidberg and by Zurbrigg, people's struggle for health became a part of the broader struggle to wrest their democratic rights from the ruling class.

Unlike the industrialised Western countries, in India a colonial pattern of health culture was imposed on the pre-existing indigenous health culture. The making of the health services in India was also subservient to the overall imperial policy of exploitation, expropriation and plunder to promote economic interests of the colonial power (Banerji 1985a:8), (Banerji 1975), (Banerji 1979).

It was also pointed out that Western medicine was brought to India to serve the ruling class—the British army and civilians and a small section of the natives, who supported the colonial rulers. Western medicine was thus used as a weapon of oppression, because it was used to strengthen the oppressors, and weaken the oppressed as they were denied access to it. As pointed out earlier, even after the overthrow of the colonial rule, access to health services continues to serve as a useful weapon for the ruling class to maintain its control over the masses (Banerji 1978a).

Colonial conquest made large masses of people even more impoverished. As a result, their health status deteriorated still further and they were unable to maintain the health culture which they had developed as a component of their overall way of life. The vacuum was filled by faith healers, sorcerers, magicians and other quack medical practitioners, who exploited the suffering of the people for their own gains.

Such an anthropological and historical analysis of determinants of a body of knowledge places the indigenous health culture in an entirely different perspective. The bulk of the social scientists, who have studied health culture of rural populations in India (e.g. Paul 1955; Marriot 1955; Carstairs 1955; Hasan 1967; Gould 1967; Khare 1963) have been overenthusiastic in discussing superstitious health beliefs and practices and that they have not paid adequate attention to the forces which have been instrumental in causing decay and degeneration of their health culture.

The colonial conquest of the country also triggered a nation-wide anti-colonial struggle. An important feature of health policies, plans and programmes in India is that they originated during the National Movement as a means to mobilise the masses. The demand for a more egalitarian health services became one of the important planks of this struggle and the leadership drew up ambitious plans for development of health services for the post-colonial era. However, after India gained independence, while the political leadership continued to renew their commitment to the lofty egalitarian pronouncements made during the anti-colonial struggle, they used essentially the same machinery which was bequeathed to them by the colonial rulers to ensure that the fruits of independence benefitted them most and that they are able to perpetuate their hold on the government of the country.

Thus, a noteworthy feature of health service development in India is that, throughout the past century and a half, it has been influenced by two powerful forces pulling it in different directions: the colonial values and practices, which continued to be nurtured by the privileged class after independence, pulling in one direction, and the anti-colonial struggle, which, after independence, took the form of struggle for democratisation.

tion, pulling in another direction. This sums up the trends in the political economy of health and health services in India.

In following the policy frame for health services which had begun to take shape during the National Movement, independent India embarked, step by step, on implementation of a comprehensive rural health service through Primary Health Centres, health planning as part of the national socio-economic plan, mass campaigns against communicable diseases, social orientation of education and training of various kinds of health workers, population control through a national programme for integrated family planning, promotion of indigenous systems of medicine, provision of adequate water supply and environmental sanitation and nutrition programmes, culminating in the launching, in 1977, of the Rural Health Scheme for entrusting the people's health to people's hands', through health workers chosen by the community (Banerji 1985a:23-28).

While the masses wrested these rights from the ruling class, the latter's class interests ensured that, through rearguard actions, none of these obviously laudable programmes is implemented properly. The Statement on National Health Policy (Government of India 1982) gives a vivid account of the failures in different fields. It laments that there is an almost wholesale adoption of health manpower development policies and establishment of durative centres based on Western models, which has created a 'cultural gap between the people and the personnel providing health care'.

CHAPTER 15

Methodological Developments

A significant feature of the alternative approaches presented in the previous chapters is that conceptualisation of a problem around a new idea or an approach has usually been followed by painstaking efforts to develop an appropriate methodological approach. It is the problem which determined the formation of the methodology. Methodology was not considered as some form of a readymade module, imported from a Western country, which can be easily implanted, transplanted, adopted or even adapted for use in a research project. Research-cum-Action, Rural Thematic Appreciation Test specially innovated or adapted for India by Mclelland, Winter and Litwin, intelligence tests and Roger's Model of Diffusion of Innovation, are some of the examples of such importation. It may be emphasised that the focus here is not on merits or otherwise of these methods; the focus is on the way a method becomes a straitjacket to confine or distort the problem of research.

It is not being claimed that adoption of the alternative approaches led to invention of a wide range of brand new research tools. It is, however, being asserted that development of insights to conceptualise problems for research and asking of the right questions have led to the search of an appropriate methodological framework. This meant, apart from other considerations involved in formulating a research design, the search for research techniques, including their adaptation or making improvisation, which ensure that they come as close as possible to the requirements for study of the research problem. The element of innovation comes more in determining how a number of techniques are sought to be combined together synergistically so that they become effective tools for

studying the problem identified for research. Here, the innovator is like a tailor, who cuts the cloth and other dress material to fit the requirements of the client. Methodology should be tailor-made to fit the requirements of the problem. A mini-skirt imported from a Western country cannot be adopted or adapted to serve as a sari in India. It is, of course, forbidden even to think of adopting or adapting a sari to serve as a mini-skirt in a Western country, because the flow of ideas must only be in one direction.

A distinctive feature of the studies cited in developing alternative approaches is that in almost all the cases considerable effort had been made to tailor the methodology to the problem. There is thus some degree of uniqueness in most of the methodological approaches. Some of these are briefly referred to below merely to serve as example.

In the NTI study of awareness of tuberculosis cases (Banerji and Andersen 1963), the most critical methodological issue was the conceptualisation of the research problem: how do tuberculosis cases in a country respond to the problem? what does it mean to them? what do they do about it? The methodological implications of such a study of 'going to the people and learning from them' were far reaching. First, as the object is to study all the cases in a community, it is to be linked to an epidemiological survey of the disease. Second, as it involves definition of a 'case', it involves the entire spectrum of radiological, microbiological and clinical considerations in the definition of a case. Third, the task before the social scientists was to acquire interdisciplinary competence to add a sociological dimension to epidemiological characteristics of the problem of tuberculosis in India. Fourth, the social scientist had to develop the criteria to define the different levels of awareness—namely, consciousness, worry and action. Fifth, they had to devise or improvise techniques to measure these levels of awareness. Sixth, taking into account considerations involved in the definition of a case and the requirements for arriving at statistically reliable conclusions, they had to define the number of the cases to be included for the study and the nature and the size of the control group. Seventh, they had to minimise possible bias introduced in the awareness data because of (a) the preceding epidemiological survey and (b) interview

of only a sample of people in a village. Eighth, they had to take steps to minimise non-statistical errors by reducing inter-interviewer differences and creation of a minimal level of interview situation. And, so on. That these elaborate steps were taken in designing only a part of the study give an indication of how a very distinctive methodology was evolved to answer the questions raised in defining the problem under study.

The methodology of study of the treatment of default is (Banerji 1967a), (Singh and Banerji 1968) in tuberculosis patients was distinctive in an entirely different fashion, as the problem was different. At conceptual level was the formulation of a sociological and epidemiological definition of a defaulter, as opposed to the earlier conventional, technocetic, arbitrary and victim blaming and clinical definition (Andersen and Banerji 1963). This alternative definition brought into focus not only the wider problems of default involved in not meeting the already existing felt need and the many problems concerning organisation and management of the National Tuberculosis Programme, but it also drew attention to the sociology of knowledge which had led to the formulation of the earlier conventional definition of treatment default. With such a conceptual framework it was possible to design the study which embodied an analysis of the system of the tuberculosis services and a three-year prospective epidemiological, clinical and sociological investigation to acquire an understanding of the consequences to individuals who had not followed doctors' instructions.

The methodological response to the ambitious study of health behaviour of rural populations in India in the context of the overall health culture and in terms of the overall socio-cultural, economic and political forces (Banerji 1982a:4-23), was of an entirely different order. The study population was chosen in terms of access to Primary Health Centres (PHC) and other health institutions and covered different parts of the country. Within each of the nineteen villages selected, anthropological data concerning response to the entire range of health problems in terms of access to different types of health institutions and how these were linked with their cultural meanings and cultural perception, were collected separately for many socio-economic strata and cross-checked a number

of times through various built-in mechanisms. Another methodological characteristic of this design was that certain key variables identified on the basis of qualitative data were used for the construction of an open ended interview schedule which was administered to a stratified representative sample of the population to impart a quantitative dimension to the conclusions derived on the basis of qualitative data. A study of the overall social, cultural, political and economic factors, in all their dynamic interaction among themselves and with the health culture, formed another distinctive feature of the design. It was also possible to analyse the time trend of the entire village social system, including the health system, for over a period of nine years.

The distinctive feature of methodology used by Santosh Kumar Sahu (1980) was to have health culture of the same tribe (Oraon) as a dependent variable against six different grades of access to health services to Oraon forming independent variables : (1) Ishpat Hospital at Rourkela; (2) other health institutions in Rourkela town; (3) government health institutions in a Resettlement Colony; (4) a village with a tribal PHC; (5) a village with a PHC subcentre; and (6) a remote village with no government health institution. Santa Raye (1982) had designed her study to project the people's perceptions and responses to the implementation the Integrated Child Development Scheme in a tribal area in Orissa. She had developed a systems approach so that she could relate the sociological and anthropological data on non-formal education, child feeding programme, maternal and child health activities with the functioning of the other components of the system.

In developing a systems approach to the research design to study the Leprosy Control Programme in Chingleput District in Tamil Nadu, K.V. Rao (1982) had included the response of the patients, their families and the village community at large as a component : epidemiological, technological and organisational and management considerations formed the other three components. Nayantara Mishra's (1984) small study on socialisation of nurses is distinguished by her research design. She had developed a method to draw the personality profiles of nurse students which was followed by an anthropological method to study how the personality

profiles underwent change through the socialisation of the nurses in the 'cultures' of the hostel, the nursing school and the hospital wards as they progressed in their education.

Mehmood Mamdani (1972) had shown how addition of a social context gave a different shape to the findings of KAP studies. He has also made important observations on aspects of methodology used in the Khanna Study (Wyon and Gordon 1971). Sheila Zurbrigg (1984) adopted what can be called a case study approach, which enabled her to give a vivid account of what it means to the poor segment of a rural community to seek help from a government institution. Djurfeldt and Lindberg (1975) studied the issues of sickness, health behaviour and health institutions in a village in Tamil Nadu in the context of social structure and production relations and modes of production. C.M.E. Mathews (1978) had underlined the importance of a long-term stay in a village, living like the people as far as possible, taking part in their lives and observing them.

In each one of the studies cited above, the very sensitisation of scholars to the need to relate their methodological approach to the research problem had also made them more concerned about reliability and validity of their data, their analysis and their interpretation.

It may be emphasised again that it is not being asserted that the methodologies referred to above are the perfect ones. These examples are presented only to point out that much headway can be made in improving the quality of research in social sciences, if a conscious effort is made to tailor the methodological approach to the research problem.

Operational Research and Systems Analysis

As pointed out in Chapter 10, sociological findings on the response of tuberculosis patients in a community were found to have extensive ramifications, which permeated into a number of disciplines. Indeed, the nodal sociological data and their ramifications formed a part of an organised complex interactive interdisciplinary network of relationships, which is the basis of a formation of a system. Obviously, the conventional research methods (e.g. survey, research-cum-action) are not adequate for

formulating an effective system. Such formulation needs : (a) blending of data from a number of disciplines to understand how the different components interact with one another and to form alternative options; (b) developing a mechanism (with or without the use of mathematical simulation models) for forecasting the outcome of the different alternatives and choice of the optimal solution; and (c) testing the solution under actual field conditions and improving it further with the help of feedback data (Andersen 1964), (Banerji 1972), (Luck et al 1971).

As pointed out earlier, an interesting feature of adoption of this research method is that testing of the chosen solution also leads to testing of the social science ideas which formed one of its components in the formation of the solution ; vindication of the idea (e.g. felt need or sputum examination) through field testing thus vindicates the concepts and methods which were used in the formulation of the ideas.

Reference has already been made to the social science contributions to a systems study of family planning programme by Mishra and his colleagues (1982). It is noteworthy that social science studies have formed a component of the wider interdisciplinary inputs embodied in the approaches of operational research and systems analysis, because these happened to be the methodological response for a research which needed optimisation of organised complexity ; again, the methodology was tailor-made to suit the needs of the problem.

CHAPTER 16

An Alternative Paradigm

The works of most of the social scientists of the country had not been of high scholastic standard. This cannot be blamed on the Western reference frame. Primarily, it is related to the intellectual stature of the scholars. Indeed, it can be argued that many social scientists embraced the Western reference frame because this dependence made them intellectually more secure; it provided them a crutch to stand on. Ghurye's (1973) autobiographical account of the growth and development of his thinking provides interesting insights. After winning the Chancellor's Medal in Sanskrit from Bombay University in 1918, he developed interest in sociology when he came under the influence of Patrick Geddes, who was teaching in Bombay University at that time. Before he headed the first department of sociology at Bombay University, Ghurye went to Cambridge to earn his doctorate under the guidance of W.H.R. Rivers and A.C. Haddon. As mentioned in Chapter 9, fourteen years after holding the chair and after providing doctoral level education to an entire generation of sociologists within the country, Ghurye (1938b) produced his work on sex habits and use of a birth control clinic in Bombay.

Understandably, social scientists in India also adopted the dominant Western reference frame of medical sociology, which is described as ahistorical, apolitical, and atheoretical, when they were called upon to work in health fields.

There have, however, been changes in what Yogendra Singh has described as the "American Tradition" of sociology and in medical sociology which emerged from the tradition. C. Wright Mills (1959), C.A. Valentine (1972), S.C. Andreski (1972) and P.A. Sorokin (1956) have been some of those who

have advocated an alternative approach to sociology and anthropology. George Foster, Ray Elling, John Mckinlay, Vicente Navarro and Raymond Illsley, are among those who have made significant contributions to the development of an alternative approach to use of social sciences in health field.

There have also been parallel changes in approach to social sciences in India, particularly in terms of their application to the health fields. One distinctive feature of these changes is that they are endogenous in nature: they have not been dependent on the Western reference frame. As a result of the work of the past three decades, a stage is now reached when one can conceive of an alternative endogenous paradigm for social sciences in health fields for a country like India. From the discussion in the previous five chapters, it is possible to identify five major categories of issues which could form the basis of the alternative paradigm.

1. That a health problem has to be seen in terms of the dynamics of the biological interactions between the causative agent(s) and a human group against a background of human ecology, which includes cultural, social, economic and political conditions, which influence the natural history of the health problems in that group or community.

2. Understanding of the people concerned—the patients, the families, the community at large—is central to formulation of any programme for intervention in the epidemiological dynamics of any community health problem. How do people perceive their health problems? What do these problems mean to them, socially and culturally? What do these problems mean in terms of suffering caused by them? To what extent do they cause economic suffering? What types of institutions have been evolved within a culture to alleviate the problems perceived by the victims, their families and the community? What is their response to the problems?

3. What should be the approach for formulating programmes of intervention in the dynamics of epidemiology of the problem through an agency to deliver a package of technology, which would blend with the pre-existing health culture to alleviate the suffering caused to people by the health problems—both at a point of time and in a time dimension? The programmes so formulated will be expected, first, to meet

the unmet felt needs of the people, and if necessary, keeping in view the epidemiological situation, active steps can be taken to generate additional felt needs to have greater epidemiological impact on the problems. In this approach, social and epidemiological aspects are considered together.

4. As the health culture of a community and its related ecological, biological and overall cultural conditions are dynamic in character, any purposive intervention in the health culture through a health programme should take into account the changes that are likely to occur over a time dimension.

5. Totally overriding and overshadowing the above four considerations relating to the health culture is the fifth consideration which concerns the forces within a society which influence decisions about policies, plans and programmes relating to community health problems. By influencing such critical areas, these social forces also influence the growth of the knowledge concerning the problems.

Taking these issues into consideration, the paradigm is visualised as one which has three basic components.

(1) The problems of health of a community and the cultural responses to these problems are functions of ecological conditions, which include modes of production and production relations. The cultural responses are in the form of cultural perception of health and health problems, their cultural meaning, formations of institutions and practices around health and health problems and the health behaviour of individuals in a community. All these factors interact with one another in a dynamic equilibrium—in a state of flux. Cultural innovations, diffusions and purposive interventions from outside are considered as stimuli for change. Health service development should thus be considered as purposive interventions in the health culture of a community. Such interventions should involve a careful analysis of the pre-existing situation and formulation of an intervention strategy which is both perceived and felt by the persons concerned to be an improvement on the pre-existing situation. This implies, taking the example of tuberculosis as a community health problem, identifying the felt needs, relating them to epidemiologically assessed needs, developing people-oriented technological intervention packages and building an organisational and management system to make the services

available and accessible to the people. The task of subordinating technology to serve the needs of the people, as perceived by them, is a very challenging one. This is particularly so in a Third World country like India, with its polarised class structure and its considerable subservience to economic and political interests of foreign powers.

2. Issues of health status of a community and development of its health services are basically political issues. As Dr B.C. Roy had pointed out in 1929, and also demonstrated with personal example when he himself acquired important political positions after independence, that politics determines 'everything'. It influences health by determining socio-economic development, including food and nutrition, water supply and environmental sanitation, housing and education. More directly, confining to the health services, it influences allocation and distribution of resources and choice of technology. At a still 'lower' level, politics determines access of different sections of a community to health services. In turn, this determines whether or not control of access to health services can be employed as a weapon of oppression—as a weapon of social control. Contrariwise, political struggle of underserved and the underprivileged becomes a struggle for economic justice, which is closely related to improvement of health status. A platform for the struggle to have access to health services becomes a part of the wider political struggle for social and economic justice. Indeed, access to health services increases the fighting power of the oppressed and it also has the potentiality of serving as one of the entry points—a lever—for promoting the wider political and economic struggle.

It needs a political analysis to understand why social scientists in India have been so obsessively dependent on the Western reference frame and why they have perpetuated a culture of mediocrity in the social sciences. An understanding of the political economy can explain how a Malthusian approach to population control was adopted to explain away failures of the political system in other social and economic fields and how this approach led to active participation of social scientists in victim blaming and motivational manipulation of the people and how it ended up in the use of coercion, force and monetary enticements on massive scale. It can also

explain why scientific knowledge was distorted in an effort to brand large number of poor people as mentally retarded. Scientific knowledge was also distorted to create markets for babyfoods, drugs and equipment. Along with important biological and cultural dimensions, the massive chronic malnutrition of the country has important political implications.

3. An historical analysis of health service development in India during the colonial and post-colonial periods has underlined the important role of certain intrinsic socio-cultural forces which set a limit to possibilities of political action and purposive interventions to improve health services. These socio-cultural processes are embeded in the historical and ecological conditions of the country. Impact of Western medicine on the pre-existing health culture, ecological consequences of colonial exploitation and plunder, limiting access of Western medicine to specific classes, using struggle for health as a component of the overall anti-colonial struggle and the post-independence changes in the power structure and their implications for health service development, are some of the issues discussed, which fall in this category. Consideration of the role of socio-cultural processes in the context of history and ecology thus forms an important component of the suggested alternative paradigm.

The parallel efforts to build an endogeneous alternative paradigm for using social sciences in health fields have thus led to the formation of a very wide conceptual framework. The work which has already been done in India, along the lines suggested above, has already contributed substantially to the body of knowledge of what can be called New Public Health—an alternative approach to education and practice of the discipline of public health which is rooted in the ecological, epidemiological, cultural, social, economic and political conditions obtaining in a Third World country like India (Mahlar 1986), (Banerji 1986c).

In this process of formation of knowledge for New Public Health it has also been possible to join hands with social scientists to provide an alternative to the dominant Western reference frame for the social sciences as a whole.

PART FOUR

Summary

01931
HP-100

COMMUNITY HEALTH CELLS
322, V. M. H. 1 Block
Koramangala
Bangalore-560034 - /
India

CHAPTER 17

Summary

Over the past thirty-five years, a large number of social science studies have been carried out in health fields in India. More important, it has been possible to institutionalise the use of social sciences as an input in health service development and in planning, programming, implementing and evaluating health services in the country. A number of institutions have been set up for this purpose and social scientists have been assigned important positions in them. This favourable attitude towards the use of social sciences has its roots in the period of anti-colonial struggle, where a demand for an equitable health service system formed an important plank.

Dr B.C. Roy and Col. Abdur Rehman have articulated the aspirations of the nationalist minded physicians. Their efforts led to the setting up of the Sub-committee on National Health of the National Planning Committee in 1938 and the Health Survey and Development Committee in 1943. The reports of both these committees had recognised the critical importance of social and economic issues in the development of health and health services in India. The National Movement also generated an endogenous approach to development of social sciences in India.

Achievement of independence was associated with basic changes in the social and political structure of the country. This had far reaching implications for its social and economic development. However, even under the changed circumstances, which were unfavourable to the masses of the people, the democratic aspirations among the masses were strong enough at least to compel the political leadership to reiterate the promises it had made to them to build an egalitarian

health service system for the country. After independence there was a rapid growth of different social science disciplines. As the country had become greatly dependent on Western countries for its 'modernisation' programmes, scholars, who held leadership positions in the different disciplines, avidly embraced the dominant 'Western Models' for the social sciences. They went to Western countries for advanced education and, in turn, invited scholars from Western countries to help in the growth and development of social sciences in India.

Hugh Leavell has played a pioneering role in promoting use of social sciences in health fields. He and his colleagues from the Harvard School of Public Health have conducted a number of major public health projects in which social scientists have been assigned important positions in interdisciplinary teams of research scholars. To Leavell also goes the credit for organising in 1956 a very significant dialogue and interaction between some of the most eminent social scientists of the country with the top level health administrators with a view to involving social scientists in health service development in India.

Leavell also played a key role in setting up the Central Health Education Bureau, the National Institute of Health Administration and Education and the Central Family Planning Institute and ensuring that each one of them has strong representations from the social sciences. Subsequently, with the increasing institutionalisation of social sciences, social scientists have been included in many other institutions for education and training of physicians and other categories of community health workers. Foreign agencies like the Ford Foundation, the Rockefeller Foundation, the Population Council (of USA) and the US Government technical assistance mission in India had provided strong financial support to these activities. These agencies had employed a large number of social scientists from the USA to work as consultants in India.

With all these efforts, some scholars from the USA were able to graft the 'Western Model' in India. They could also build a large body of Indian social scientists, who had been taught to eulogise the virtues of the Western Model. Initially, social scientists were involved in promoting health education in general. Later on, the entire focus shifted to promotion of

family planning : how to motivate people to accept family planning. Subsequently, social science inputs covered areas such as health service development, communicable diseases control, community health behaviour, hospital administration, education and training of health workers and professionalisation of health personnel, nutrition, mental health and health economics.

Despite the substantial support received from foreign countries and despite the enormous volume of work done in this field, it has not been possible to build a sound body of knowledge in this field. On many occasions the role of social scientists have been counter-productive—e.g. victim blaming and motivational manipulation of people. One reason why the foreign consultants have not been able to make a substantial impact is that they used the dominant Western reference frame, which, even in the context of the Western countries, is apolitical, ahistorical and atheoretical. The meek submission by the Indian social scientists to the ideas handed down to them by their foreign counterparts provides a manifestation of the culture of mediocrity which has dominated the fields of social sciences in India.

A parallel effort to develop an alternative approach has been a remarkable feature of this development. This effort was started by the sociologists at the National Tuberculosis Institute at Bangalore in 1959. Instead of telling people what is good for them or what they should do or how to behave, the sociologists designed research studies in order to 'go to the people and learn from them'. Their studies showed that there is a great deal of unmet felt need for treatment among the infectious tuberculosis cases in a rural population. These data on overlap between community felt need and epidemiologically assessed needs were also used to develop a people-oriented technology for diagnosing tuberculosis patients in rural areas and also build an organisational and managerial framework for developing a nationally applicable, socially acceptable and epidemiologically effective tuberculosis programme for India. Many methodological innovations had to be developed to obtain data on the problems which were identified as a result of this new approach to conceptualisation of the issues.

Subsequently, the approach developed at NTI could be

generalised for large areas in the field of community health. Further developments in this direction led to the recognition that health service development is not merely a managerial and technological process with epidemiological and sociological perspectives, but it is also a political process which is shaped by the modes of production and production relations. This underlined the relevance of study of various aspect of political economy of health, health services, nutrition and population control in India. In turn, study of political economy led to study of dynamics of the fundamental socio-culture processes which are rooted in the ecology and history of the country. This led to exploration of the process of induction of Western medicine at the time of the colonial conquest of the country and to the health issues that emerged in the course of the anti-colonial struggle.

All these ideas have been brought together to form an alternative paradigm for using social sciences in a Third World country like India.

References

Abel-Smith, B. (1986) ; Funding Health For All: Is Insurance the Answer? *World Health Forum*. Vol. 7, No. 1, pp. 3-11.

Ahluwalia, A. (1972): A Trend Report on Medicine Chapter 5 *In A Survey of Research in Sociology and Social Anthropology*, Vol. 3, New Delhi, Indian Council of Social Science Research.

Andersen S. (1964): Operations Research in Public Health, *Public Health Reports*, Vol. 79, No. 4, April.

Andersen, S. and Banerji, D. (1963): A Sociological Enquiry into an Urban Tuberculosis Programme in India, *Bulletin World Health Organization*, Vol. 29, p. 685.

Andreski, S. C. (1972): *Social Sciences as Sorcery*, London, Andre Deutsch.

Banerjee, S. (1979): *Family Planning Communication: A Critique of the Indian Programme*, New Delhi, Radiant Publishers.

Banerji, D. (1966): An Operational Research Approach to India's Family Planning Programme, *in National Institute of Health Administration and Education: Seminar on Social Sciences in Health Administration: Conclusions and Recommendations*, New Delhi, NIHA .

Banerji, D. (1967a): Behaviour of Tuberculosis Patients Towards a Treatment Organisation Offering Limited Supervision, *Indian Journal of Tuberculosis*, Vol. 14, pp. 156-172.

Banerji, D. (1967b); Role of Social Sciences in Hospital Administration, *Hospital Administration*, Vol. 14, pp. 1-4.

Banerji, D. (1967c): Health Economics in Developing Countries, *Journal of the Indian Medical Association*, Vol. 49, No. 9, Nov. 1, pp. 417-421.

Banerji, D. (1969): Administration of the Family Planning Programme: A Plea for an Operational Research Approach, *Management in Government*, Vol. 1, No. 2, p. 46.

Banerji, D. (1970): Effect of Treatment Default on Result of Treatment in a Routine Practice in India, *Proceedings of the XXth International Tuberculosis Conference*, Paris, International Union Against Tuberculosis.

Banerji, D. (1971a): Tuberculosis as a Problem of Social Planning in India, *NIHAE Bulletin* Vol. 4, No. 1, pp. 9-25.

Banerji, D. (1971b): *Family Planning in India: A Critique and a Perspective*, New Delhi, People's Publishing House.

Banerji, D. (1972): Operational Research in the Field of Community Health, *Opsearch*, Vol. 9, Nos. 3-4, September-December, pp. 135-142.

Banerji, D. (1973a): Critical Review of the Role and Utilization of Social Scientists in Promoting Social Sciences Research in Health Fields in India, *Journal of Indian Medical Association*, Vol. 60, No. 4, pp. 145-147.

Banerji, D. (1973b): Social Orientation of Medical Education in India, *Economic and Political Weekly*, Vol. 8, pp. 485-488.

Banerji, D. (1973c): Impact of Rural Health Services on the Health Behaviour of Rural Populations in India: A Preliminary Communication, *Economic and Political Weekly*, Vol. 8, December 22, pp. 2261-2268.

Banerji, D. (1974): Family Planning in India—Some Inhibiting Factors, in Bose, Ashish et al. (ed): *Population in India's Development: 1947-20000*, Delhi, Vikas Publishing House, pp. 405-414.

Banerji, D. (1975): Social and Cultural Foundations of Health Services Systems of India, *Inquiry*, Vol. 12, No. 2, Supplement, pp. 70-85.

Banerji, D. (1976): Will Forcible Sterilisation be Effective? *Economic and Political Weekly*, Vol. 11, No. 18, May 1, pp. 665-668.

Banerji, D. (1977a): Community Response to the Intensified Family Planning Programme, *Economic and Political Weekly*, Vol. 12, Nos. 6, 7 and 8, Annual No. pp. 261-266.

Banerji, D. (1977b): Formulating an Alternative Rural Health Care System for India: Issues and Perspectives, in Naik, J.P. *An Alternative System of Health Care Service in India: Some Proposals*, Bombay, Allied Publishers, pp. 31-47.

Banerji, D. (1978a): Class View of Health and Disease, Book Review of "The Picture of Health Environmental Sources

of Diseases by Erik Eckholm", *Economic and Political Weekly*, Vol. 13, No. 27, pp. 1103-1106.

Banerji, D. (1978b): Facade of the Rural Health Care Scheme of India as an Opportunity, *Yojana*, Vol. 22, No. 14-15, pp. 23-26.

Banerji, D. (1978c): Epidemiological Issues in Nutrition, *Indian Journal of Nutrition and Dietetics*, Vol. 16, pp. 189-94.

Banerji, D. (1978d): Political Issues in Health, Population and Nutrition, *Social Scientist*, Vol. 7, Nos. 73-74, August/September, pp. 159-168.

Banerji, D. (1978e): Political Dimensions of Health and Health Services, *Economic and Political Weekly*, Vol. 13, No. 22, pp. 924-927.

Banerji, D. (1978f): Health as a Lever for Another Development, *Development Dialogue*, Vol. 1, pp. 19-25.

Banerji, D. (1979): Place of the Indigenous and the Western Systems of Medicine in the Health Services of India, *International Journal of Health Services*, Vol. 9, No. 3, pp. 511-519.

Banerji, D. (1980a): Political Economy of Population Control in India, in Bondestam, L. and Bergstrom, S. (ed): *Poverty and Population Control*, London, Academic Press, pp. 83-101.

Banerji, D. (1980b): Social Aspects of Tuberculosis Problems in India, in Rao, K.N. (ed): *Text Book on Tuberculosis* Rev. ed. New Delhi, Vikas, Chapter 9.

Banerji, D. (1980c): A Manipulated Programme, *Economic and Political Weekly*, Vol. 15, No. 4, pp. 151-154.

Banerji, D. (1981a): Hospitals and Promotion of Community Participation in Primary Health Care, in Aga Khan Foundation (1981): *Proceedings of the Conference on Role of Hospitals in Primary Health Care*, Karachi, Aga Khan Foundation.

Banerji, D. (1981b): Measurement of Poverty and Undernutrition, *Economic and Political Weekly*, Vol. XVI, No. 39, September 26.

Banerji, D. (1981c): Impact of Drought on Nutrition and Health Status of the Population of India, in Garcia, R.V. and Escudero, J.C. (ed): *Drought and Man: The 1972 Case History Report of an IFIAS Research Project*, Vol. 2, The

Constant Catastrophe: Malnutrition, Famines and Draught, Oxford, Pergamon Press, pp. 104-112.

Banerji, D. (1982b): *Poverty, Class and Health Culture in India*, Vol. 1, New Delhi, Prachi Prakashan.

Banerji, D. (1982b): Community and Health Services, in Brems, S. (ed); *Message from Calcutta: Highlights of the 3rd International Congress of the World Federation of Public Health Association and the 25th Annual Conference of the Indian Public Health Association: Primary Health Care—World Strategy, February 23-26, 1981, Calcutta*, Washington, WFPHA.

Banerji, D. (1983): Cultural and Biological Consequences of Hunger, in Basu, A. and Malhotra, K.C.: *Proceedings of the Indian Statistical Institute Golden Jubilee International Conference on Human Genetics and Adoption at Indian Statistical Institute, February 1-5, 1982*, Calcutta, Indian Statistical Institute, pp. 309-325.

Banerji, D. (1984a) Towards a more Comprehensive Social Science Approach to Health Problems: The Case of Leprosy, *IASSI Quarterly Newsletter*, June, Vol. 3, Nos. 1 and 2, pp. 8-10.

Banerji, D. (1984b): Social Science Issues in Hospital Administration, *Indian Journal of Social Work*, Vol. XLV, No. 1 pp. 7-12.

Banerji, D. (1984c): Primary Health Care: Selective or Comprehensive, *World Health Forum*, Vol. 5, pp. 312-315.

Banerji, D. (1984d): Political Economy of Western Medicine in Third World Countries, in Mckinlay, J.B. (ed): *Issues in Political Economy of Health Care*, London, Tavistock.

Banerji, D. (1985a): *Health and Family Planning Services in India: An Epidemiological, Socio-cultural and Political Analysis and a Perspective*, New Delhi, Lok Paksh.

Banerji, D. (1985b): *The Making of Health Services in a Country: Postulates of a Theory*, New Delhi, Lok Paksh.

Banerji, D. (1986a): Technocentric Approach to Health: Western Response to Alma-Ata, *Economic and Political Weekly*, Vol. 21, No. 28. July 12, pp. 1233-1234.

Banerji, D. (1986b): Discussion: Funding Health For All: Is Insurance the Answer? by Brian Abel-Smith, *World Health Forum*, Vol. 7, No. 1, pp. 12-14.

Banerji, D. (1986c): Health Promotion: A Personal View from the South, *Health Promotion*, Vol. 1, No. 1, pp. 81-82.

Banerji, D. and Andersen, S. (1963): A Sociological Study of the Awareness of Symptoms Suggestive of Pulmonary Tuberculosis, *Bulletin of World Health Organization*, Vol. 29, No. 5, pp. 665-683.

Bardhan, P.K. (1974): Some Aspects of Inequality, in Bose, A. et al. (ed): *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House, pp. 65-74.

Basu, R.N., J. Jezek and N.A. Ward (1979): *The Eradication of Smallpox from India*, Geneva, WHO (WHO Regional Publications South-East Asia Series, No. 5).

Bergstrom, S. (1982): Family Welfare as a Health Need in Indian Population Policy, *Tropical Doctor*, pt. 1, October, pp. 182-184.

Bergstrom, S. (1980): Fertility and Sub-fertility as Health Problems—Population Control Versus Family Planning by the Family, in Bondestam, Lars and Bergstrom, S. (ed): *Poverty and Population Control*, London, Academic Press, pp. 39-60.

de Bernis, G.D. (1976): *Two Ways of Health Economics*, based on Lecture Delivered at the CSMCH, JNU, New Delhi,

Bhandari, L.R. (1979): *Communication for Social Marketing: A Methodology for Developing Communication Appeals for Family Planning Programme*, New Delhi, Macmillan.

Bhave, Vinoba (1963): *Swraj Sashtra: The Principles of a Non-Violent Political Order*, Varanasi, Sarva Seva Sangh.

Boland, R. and Young M. (1982): The Strategy, Cost and Progress of Primay Health Care, *Bulletin of Pan American Health Organization*, Vol. 16, No. 3, pp. 233-241.

Bondestam, Lars (1980a): Political Ideology of Population Control, in Bondestam, Lars and Bergstrom, S. (ed): *Poverty and Population Control*, London, Academic Press, pp. 1-38.

Bondestam, L. and Bergstrom, S. (ed) (1980): *Poverty and Population Control*, London, Academic Press.

Borramans, V. (1978): The Inverse of Managed Health, *Development Dialogue*, Vol. 1, pp. 26-34.

Bose, A. (1985) : *Demography Beyond Decimal Points : Address*,

Tenth Annual Conference, Bangalore, Bangalore, Indian Association for the Study of Population.

Bose, A. (1956) : *Population Stabilisation Through Bureaucratic Targetism or Social Transformation : Presidential Address Eleventh Annual Conference*, Varanasi, Indian Association for the Study of Population.

Bose, A. and Desai, P.B. (ed) (1983) : *Studies in Social Dynamics of Primary Health Care*, Delhi, Hindustan Publishing House.

Bose, A. et al. (ed) (1974) : *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House.

Bose, N.K. (1981) : *He that Blazed the Trail: Essays in Honour of Dr. Gyanchand*, New Delhi, Peple's Publishing House.

Brij Mohan (1975) : Some Applications of Industrial Engineering in Hospital Administration, *NIHAE Bulletin*, Vol. 8, No. 4, pp. 249-256.

Brown, E.R. (1976) ; Public Health in Imperialism : Early Rockefeller Programmes at Home and Abroad, *American Journal of Public Health*, Vol. 66, No. 9, pp. 897-903.

Brown, E.R. and Margo, G.E. (1978) : Health Education : Can the Reformers be Reformed? *International Journal of Health Services*, Vol. 8, No. 1, pp. 3-16.

Carstairs, G.M. (1955) : Medicine and Faith in Rural Rajasthan, in Paul, B.D. (ed) : *Health, Culture and Community*, New York, Russell Sage Foundation.

Carstairs, G.M. (1957) : *The Twice Born : A Study of a Community of High Caste Hindus*, London, Hogarth Press.

Carstairs, G.M. and Kapoor, R.L. (1976) : *The Great Universe of Kota : Stress Change and Mental Disorder in an Indian Village*, California, University of California Press.

Census of India (1981) : *Provisional Population Totals Series 1—India, Paper 1 of 1981*, New Delhi, Registrar General and Census Commissioner for India.

Central Health Education Bureau (1959) : *Report of the First Health Educator's Conference*, New Delhi, Central Health Education Bureau.

Central Health Education Bureau (1960) : *Report of the Second Health Educator's Conference*, New Delhi, Central Health Education Bureau.

Central Health Education Bureau, (1964) : *Report of the Third Health Educator's Conference*, New Delhi, Central Health Education Bureau.

Central Health Education Bureau (1965) : *Report of the Fourth Health Educator's Conference*, New Delhi, Central Health Education Bureau.

Central Health Education Bureau (1966) : *Report of the Fifth Health Education Conference*, New Delhi, Central Health Education Bureau.

Central Health Education Bureau (1969) : *Report of the Conference on Review of Behavioural Research in Health and Extension Education*, New Delhi, CHEB.

Central Health Education Bureau (1980) : *Report of the National Conference on Status of Health Education Service in India*, New Delhi, CHEB.

Central Health Education Bureau (1982) : *Development of Courses in Health Education in India : Report on Follow-up Study of D.H.E. Students*, New Delhi, CHEB.

Chakraborty, A.K. (1979) : Twentieth Anniversary of NTI—What has the NTI Achieved? *NTI Newsletter* Vol. 16, No. 4, December, pp. 104-110.

Chandrasekaran, C. and Kuder, K. (1965) : *Family Planning Through Clinics*, Bombay, Allied Publishers.

Christophers, S.R. (1924) : *Ind. Med. Gaz.* Vol. 159, pp. 196-200.

Christophers, S.R. (1949) : *Malariaiology* ed. by M.F. Boyd., London, W.B. Saunders.

Cleaver, H. (1976) : Political Economy of Malaria Decontrol *Economic and Political Weekly*, Vol. 11, No. 36, pp. 1463-1473.

Dandekar, V.M. and Rath, N. (1971) : *Poverty in India*, Poona, Indian School of Political Economy.

Dandekar, V.M. (1979) : Below the Poverty Line, *Economic and Political Weekly*, Vol. 14, Nos. 7-8, Annual, pp. 233-236.

Dandekar, V.M. (1981) : On Measurement of Poverty, *Economic and Political Weekly*, Vol. XVI, No. 30, July 25, pp. 1241-1250.

Dasgupta, A. (1973): *Cost Analysis for Health Care Institutions: Paper Presented at World Health Organization Meeting on Health Economics Programmes*, New Delhi.

Demerath, N.J. (1976); *Birth Control and Foreign Policy: The Alternatives to Family Planning*, New York, Harper and Row.

Deppe, Hans-ulrich (1976) : Some Theses on the Economic and Political Development of Health Care in the Federal Republic of Germany, Paper Presented to the *International Conference 'The Political Economy of Health'*, June 28-July 2, 1976, Amsterdam.

Desai, A.R. (1970) : An Alternative Approach to Development, in Bose, A. et al. (ed) : *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House, pp. 89-100.

Desai, A.R. (1979) : *Urban Family and Family Planning in India*, Bombay, Popular Prakashan.

Desai, I.P. (1981) : Craft of Sociology in India : An Autobiographical Perspective, *Economic and Political Weekly*, Vol. 16, Nos. 6 and 7, pp. 197-204, pp. 246-351.

Desai, P.B. (1983) : Health and Family Welfare, in Bose, A. and Desai, P.B. : *Studies in Social Dynamics of Primary Health Care*, Delhi, Hindustan Publishing House, pp. 179-200.

Dhillon, H.S (1968) : *Behavioural Sciences in Public Health : Contributions and Problems Limiting Collaboration*, New Delhi, Central Health Education Bureau (CHEB Technical Series No. 5).

Dhillon. H.S. and Kar, S.B. (1963) : Behavioural Science and Public Health, *Indian Journal of Public Health*, Vol. 17, pp. 9-24.

Dhillon, H.S. and Kar, S.B. (1965) : Malaria Eradication : An Investigation of Cultural Patterns and Beliefs among Tribal Population in India, *International Journal of Health Education*, Vol. 7, pp. 31-40.

Djurfeldt, G. and Lindberg, S. (1975) : *Pills Against Poverty : A Study of the Introduction of Western Medicine in a Tamil Village*, New Delhi, Oxford and IBH Publishers (Scandinevian Institute of Asian Studies, Monograph Series No. 23).

Doyal, L. (1979) : *Political Economy of Health*, London, Pluto Press.

Dube, S.C. (1978) : Anthropology and the Challenge of Development : A View from the Third World, in *Proceedings of*

the Xth International Congress of Anthropological and Ethnological Sciences, New Delhi.

Dubos, R. and Dubos, J. (1952) : *The White Plague*, Boston, Little Brown.

Dubos, Rene (1959) : *Mirage of Health, Utopias, Progress and Biological Change*, New York, Anchor Books.

Dutt, R.C. (1968) ; *Romesh Chandra Dutt*, New Delhi, Publication Division.

Eckholm, E P. (1977) : *Picture of Health : Environmental Sources of Diseases*, New York, Norton.

Editorial (1984) : *Socialist Health Review* (Bombay) Vol. 1, No. 1, pp. 1.

Elling, R.H. (1978) : *Political Economy, Cultural Hegemony of Mixes of Traditional and Modern Medicine*, Draft Paper Presented at the "Traditional and Modern Medicine Paper Session of the Medical Sociology Research Committee International Sociological Association, IX World Congress of Sociology, Uppsala Sweden, August 14-19, 1978.

Elling, R.H. (1971) : *National Health Care : Issues and Problems in Socialized Medicine*, Aldine, Atherto Books.

Elling, R.H. and Kerr, H. (1974) : *Cross National Study of Health Systems—The Selections of Contrast Cases and a Tentative Framework for In-depth Case Studies*, Canada.

Elling, R.H. and Lee, O.J. (1966) : Formal Connections of Community Leadership to the Health System, *Milbank Memorial Fund Quarterly*, Vol. 64, pp. 294-306.

Elling, R.H. and Sokolowska, M. (ed) (1978) : *Medical Sociologists at Work*, New Jersey, Transaction Books.

Family Planning Foundation (1983) : *Annual Report 1983*, New Delhi, Family Planning Foundation.

Feldstein, M.S., Piot, M.A. and Sudaresan, T.K. (1973) : Resource Allocation Model for Public Health Planning : A Case Study of Tuberculosis Control, *Bulletin of the World Health Organization*, Vol. 48, Supplement.

Foster, G.M. (1958) : *Problems of Intercultural Health Programmes*, New York, Social Science Research Council.

Foster, G.M. (1982) : Applied Anthropology and International Health : Retrospect and Prospect, *Human Organization*, Vol. 41, No. 3, pp. 189-197.

Foucault, M. (1973) : *The Birth of a Clinic : An Archeology of Medical Perception*, New York, Pantheon.

Fulop, T. and Roemer, M.I. (1982) : *International Development of Health Manpower Policy*, Geneva, World Health Organization (WHO Offset Publication No. 61), pp. 157-161.

Galdston, I. (1954) : *The Meaning of Social Medicine*, Cambridge, Massachusetts, Harvad University Press.

Gandhi, M.K. (1927) : *My Experiments with Truth*, Ahemdabad, Navjivan, pp. 164-165, 133-134 and 256-257.

Gandhigram Institute of Rural Health and Family Planning (1979) : *Annual Report*, Madurai, Gandhigram Institute of Rural Health and Family Planning.

Ganguli, B.N. (1973) : *Gandhi's Social Philosophy : Perspective and Relevance*, New Delhi, V!kas.

Ganguli, B.N. (1974) : The Future Quality of Population, in Bose, A. et al. (ed) : *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House, pp. 29-44.

George, M.V. (1976) : Community Approach to Health Care Services by Popularising Cooperative Rural Dispensaries, in Indian Coucil of Medical Research : *Alternative Approaches to Health Care : Report of a Symposium Organized Jointly by ICMR and ICSSR*, New Delhi, ICMR, pp. 132-137.

Ghurye, G.S. (1983a) : *Birth Control Practice in Bombay*, in *Report of 2nd All Indian Population and 1st Family Hygiene Conference, Bombay*, Bombay.

Ghurye, G.S. (1938b) : Sex Habits of a Sample of Middle Class People of Bombay, in *Report of 2nd All India Population and 1st Family Hygience Conference held in Bombay*, Bombay.

Ghurye, G.S. (1973) : *I and Other Explorations*, Bombay, Popular Prakashan.

Gideon, H. (1962) : A Baby is Born in the Punjab, *American Anthropologist*, Vol. 64, pp. 1220-1234.

Gish, Oscar (1976) : Alternative Approaches to Health Planning, *Assignment Children*, No. 33, January-March.

Gopalan, C. (1983a) : Small is Healthy? For the Poor, not for the Rich, *NFI Bulletin*, October, pp. 1-5.

Gopalan, C. (1983b) : Development and Deprivation : The Indian Experience, *Economic and Political Weekly*, Vol. 18, No. 51, pp. 2163-2168.

Gopalan, C. and Narsingarao, B.S. (1971) : Nutritional Constraints on Growth and Development in Current Indian Dietaries, *Indian Journal of Medical Research*, Vol. 59, No. 6, Suppl., p. 111.

Gothi, G. D. (1976) : Five Year Incidence of Tuberculosis and Crude Mortality in Relation to Non-specific Tuberculosis Sensitivity, *Indian Journal of Tuberculosis*, Vol. 23, No. 2, pp. 58-63.

Gothi, G.D. (1978) : Incidence of Pulmonary Tuberculosis and Change in Bacteriological Status of Cases at Shorter Intervals, *Indian Journal of Medical Research*, Vol. 68, October, pp. 564-574.

Gould, H.A. (1967) : Implications of Technological Change for Folk and Scientific Medicine, *American Anthropologist*, Vol. 59, pp. 507-516.

Government of India, Health Survey and Development Committee (Bhore Committee) (1946) : *Report*, Vol. 2, Delhi, Manager of Publications.

Government of India, Committee on the Indigenous System of Medicine (1948) : *Report*, Vol. 1, New Delhi, Ministry of Health.

Government of India (1957) : *Report of the Conference on Social and Cultural Factors in Environmental Sanitation in Rural India*, New Delhi, Publication Division.

Government of India, Health Survey and Planning Committee (Mudaliar Committee) (1962) : *Report*, Vol. 1, New Delhi, Ministry of Health.

Government of India, Committee on Administrative and Financial Aspects of the I.U.C.D. Programme (1966) : *Report*, New Delhi, Ministry of Health and Family Planning.

Government of India (1974a) : *Communication Policy for Family Planning : Integrated Report of the Working Groups*, New Delhi, Ministry of Health and Family Planning.

Government of India (1974b) : *Fifth Five Year Plan 1974-79*, New Delhi, Planning Commission.

Government of India, Group on Medical Education and Support Manpower (Shrivastav Committee) (1975) : *Health Services and Medical Education : A Programme for Immediate Action*, *Report*, New Delhi, Ministry of Health and Family Planning.

Government of India (1976) : *National Population Policy*, New Delhi, Ministry of Health and Family Planning.

Government of India (1978) : *Annual Report 1977-78*, New Delhi, Ministry of Health and Family Welfare, pp. i-iii.

Government of India (1979) : *Draft Sixth Five Year Plan, Revised*, New Delhi, Planning Commission.

Government of India, Working Group on Population Policy (1980) : *Report*, New Delhi, Planning Commission.

Government of India (1981) : *Sixth Five Year Plan 1980-85*, New Delhi, Planning Commission.

Government of India (1982) : *Statement on National Health Policy*, New Delhi, Ministry of Health and Family Welfare.

Government of India (1986) : *Seventh Five Year Plan*, New Delhi, Planning Commission.

Grant, J.B. (1963) : International Planning of Organization of Medical Care, in Seipp, C. (ed) : *Health Care for the Community : Selected Papers of Dr. John B. Grant*, Baltimore, The Johns Hopkins University Press, pp. 52-57.

Grant, J.P. (1983) : A Child Survival and Development Revolution, *Assignment Children*, Vols. 61-62, No. 1, pp. 21-31.

Grant, J.P. (1984) : Marketing Child Survival, *Assignment Children*, 65/68, pp. 3-9.

Grigg, E.R.N. (1958) : The Arcana of Pulmonary Tuberculosis, *American Review of Tuberculosis and Pulmonary Diseases*, Four Parts, Vol. 78, pp. 151-172, 426-453, 583-603.

Gunatilleke, G. (ed) (1984) : *Intersectoral Linkages and Health Development : Case Studies in India (Kerala State), Jamaica, Norway, Sri Lanka, and Thailand*. Geneva, World Health Organization (WHO Offset Publication No. 83).

Gunnarsson, Bo (1980) : Japan's Abortion Laws and Birth Control Ambitions in the Underdeveloped Countries in Asia, in Bondestam, L. and Bergstrom, S. (ed) : *Poverty and Population Con'trol*, London, Academic Press, pp. 125-136.

Gupta, P.B. (1965) : A Method of Estimating the Reduction in Birth Rate by Sterilization of Married Couples *Sankhya Series 13*, Vol. 27, Pts. 344.

Gupta, S.C., Bagga, S.L. and Surya, M. (1965) : An Educational Approach to Smallpox Eradication, *International Journal of Health Education*, Vol. 7, pp. 5-9.

Gupta, Y.P. et al. (1982) : *A Report on Follow up Study of Trainees of Certificate Course in Health Education*, New Delhi, CHEB (CHEB Technical Series No. 39).

Gupta, Y.P. et al. (1968) : *A Report on Demographic Base-line Data of Urban Field Study and Demonstration Area of Central Health Education Bureau*, New Delhi, CHEB (CHEB Technical Series No. 25).

Gussow, J.D. (1980) : Who Pays the Piper? *Teachers College Record*, Vol. 81, No. 4, Summer, pp. 448-466.

Gussow, J.D. and Contento, I. (1982) : Nutrition Education in a Changing World: A Conceptualization and Selective Review, in *World Review of Nutrition and Dietetics*.

Gyanchand (1939) : *India's Teeming Millions*, London, George Allen and Unwin.

Hasan, K.A. (1967) : *Cultural Frontier of Health in village India*, Bombay, Manektalas.

Hochbaum, G.M. (1965) : Evaluation—A Diagnostic Procedure, in *Studies and Research in Health Education : International Conference on Health and Health Education*, Vol. 5.

Hofsten, E. (1980) Bucharest and After, in Bondestam, L. and Bergstrom, S. (ed) : *Poverty and Population Control*, London, Academic Press, pp. 213-221.

Illich, I. (1977) : *Limits to Medicine—Medical Nemesis : The Expropriation of Health*, Harmondsworth, Penguin.

Illsley, R. (1980) : *Sociology in Health and Medicine*, London, Nuffield Provincial Trust.

India Population Project (U.P) (1973) : *Newsletter*, Vol. 1, No. 1, March.

India Population Project (U.P) (1978) : *Newsletter*, Vol. 4, No. 3, May.

Indian Council of Medical Research (1959) : *Tuberculosis in India : A Sample Survey, 1955-58*, New Delhi, Indian Council of Medical Research.

Indian Council of Medical Research (1977) : *Evaluation of National Tuberculosis Programme*, New Delhi, ICMR.

Indian Council of Medical Research and Indian Council of Social Science Research (1976) : *Alternative Approaches to Health Care: Report of a Symposium, Hyderabad, October 27-30, 1976*, New Delhi, ICMR.

Indian Council of Social Science Research, Review Committee (1973) : *A Report on Social Sciences in India : Retrospective and Prospective* 2 Vols., (Chairman : Malcolm S. Adiseshiah), New Delhi, ICSSR.

Indian Council of Social Science Research (1975) : *Report of the UGC-ICSSR Study Team on the Role of Social Sciences in Education for Agriculture, Engineering and Medicine*, New Delhi, ICSSR.

Indian Council of Social Science Research and Indian Council of Medical Research (1981) : *Health for All : An Alternative Strategy-Report of a Study Group Set up Jointly by ICSSR and ICMR*, Pune, Indian Institute of Education.

Indian Institute of Public Administration, Conference on Personnel Administration (1968) : *Report*, New Delhi, Indian Institute of Public Administration.

Jawaharlal Nehru University (1986): *School of Social Sciences: Handbook, 1985-86*, New Delhi, Jawaharlal Nehru University.

Jeffery, R. (1979) : Recognizing India's Doctors : The Institutionalization of Medical Dependency 1918-39, *Modern Asian Studies*, Vol. 13, No. 2, pp. 301-326.

Jobert, B. (1985): Populism and Health Policy: The Case of Community Health Volunteer in India, *Social Science and Medicine*, Vol. 20, No. 1, pp. 1-28.

Johns Hopkins University, Department of International Health (1976) : *Functional Analysis of Health Needs and Services*, Bombay, Asia Publishing House.

Joshi, P.C. (1974) : Population and Poverty : The Moral Discord, in Bose, A. et al. (ed) : *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House, pp. 75-88.

Kakar, D.N. (1977) : *Folk and Modern Medicine*, Delhi, New Asian Publisher.

Kakar, V.N. (1979) : *Population Communication in India*, New Delhi, Ministry of Health and Family Welfare.

Katz, E. et al. (1952) : *Personal Influence*, Glenco, The Free Press.

Kelman, S. (1975) : The Social Nature of the Definition Problem in Health, *International Journal of Health Services*, Vol. 5, No. 4.

Kielman, A.A. et al. (1978) : The Narangwal Experiment on Interactions of Nutrition and Infections : Morbidity and Mortality Effects, *Indian Journal of Medical Research*, Vol. 68 (Suppl), December, pp. 21-41.

Khare, R.S. (1963) : Folk Medicine in a North Indian Village, *Human Organization*, Vol. 22, No. 1.

Krishnaji, N. (1981a) : On Measuring Incidence of Under-nutrition : What is a Consumer Unit, *Economic and Political Weekly*, Vol. 16, No. 37, pp. 1509-1511.

Krishnaji, N. (1981b) : On Measuring Incidence of Under-nutrition : Note of Sukhatme's Procedure, *Economic and Political Weekly*, Vol. 16, No. 22, pp. 989-992.

Krishnamurthy, G.K. (1968) : *Research in Family Planning in India*, Delhi, Sterling Publishers.

Kumarappa, B. (ed) (1952) : *Rebuilding our Villages*, Ahmedabad, Navjivan.

Kumarappa, J.C. (1958) : *Why Village Movement? A Plea for Village Centered Economic Order in India* 6th ed. Kashi, Surva Seva Sangh.

Kuppuswami, T.N. (1971) : Work Study in Hospital Laboratory, *NIHAE Bulletin*, Vol. 4, No. 4, pp. 249-257

Kuppuswami, T.N. (1975) : Patients and Hospitals, *NIHAE Bulletin*, Vol. 8, No. 1, pp. 53-60.

Levin, L.S. et al. (1977) : *Self-Care*, London, Croom Helm.

Luck, G.M., J. Luckman, B.W. Smith and J. Stringer (1971) : *Patients, Hospitals and Operational Research*, London, Tavistock Publications.

Madan, T.N. (1969) : Who Chooses this Medicine and Why, *Economic and Political Weekly*, Vol. 4, No. 37, pp. 1475-1484.

Madan, T.N. (1977) : Towards a Humanised Medicine, *Journal of Health Administration*, Vol. 10, No. 3, pp. 167-176.

Madan, T.N. (1980) : *Doctors and Society*, New Delhi, Vikas Publishing House.

Mahler, H. (1981) : Keynote Address, in Aga Khan Foundation *Proceedings of the Conference on Role of Hospitals in Primary Health Care*, Karachi, Aga Khan Foundation. pp. 3-5.

Mahler, H. (1982) : *Inaugural Address to the Conference of the International Union of Health Educators*, held at Hobart, Australia in August 1982.

Mahler, H. (1985) : *Proceedings of the Silver Jubilee, Celebrations of NTI*, Bangalore, NTI.

Mahler, H. (1986) : Towards a New Public Health, *Health Promotion*, Vol. 1, No. 1, May, p. 14.

Mamdani, M. (1972) : *Myth of Population Control, Family, Caste and Class in an Indian Village*, New York, Monthly Review Press.

Mandelbaum, D.G. (1974) : *Human Fertility in India*, Berkeley, University of California Press.

Mankodi, K. and Van der Veen, K.W. (1945) : Treatment Failure in Indian National T.B. Programme, *Economic and Political Weekly*, Vol. 20, No. 21, May 25, pp. 917-926.

Marriot, M. (1955a) : Western Medicine in a Village of Northern India, in Paul, B.D. (ed) : *Health, Culture and Community*, New York, Russell Sage Foundation, pp. 239-268.

Marriot, M. (1955b) : *Village India: Studies in the Little Communities*, Chicago, University of Chicago Press.

Maru, R. Nirmala Murthy and J.K. Satia (1983) : Management Interventions in Established Bureaucracies : A Case Study, *Economic and Political Weekly*, Vol. 18, No. 35, pp. M. 98-M.110.

Mathews, C.M.E. (1979) : *Health and Culture in a South Indian Village*, New Delhi, Sterling.

McDermott, Walsh (1969) : Demography, Culture and Economics and the Evolutionary Stages of Medicine, in Kilbourne, E.D. and Smillie, W.G. (ed) : *Human Ecology and Public Health*, 4th ed. London, Macmillan, pp. 7-28.

McKeown, T. (1965) : *Medicine in Modern Society*, London, George Allen and Unwin.

McKeown, T. (1976) : *Role of Medicine : Dream, Mirage or Nemesis?* London, Nuffield Provincial Hospitals Trust.

McKeown, T. and McLachlan, G. (1971) : Medical History and Medical Care : A Symposium of Perspectives, London, Oxford University Press.

McKinlay, J.B. (1984) : *Issues in the Political Economy of Health Care*, London, Tavistock.

McKnight, J.L. (1978) : A Cancerous Health Development : The Case of American Medicine, *Development Dialogue*, Vol. 1, pp. 14-18.

Medical Council of India (1982) : *Curriculum for Undergraduate Medical Education*, New Delhi, Medical Council of India.

Mehta, J.C. (1974) : Hospital Engineering—a Delayed Concept, *NIHAE Bulletin*, Vol. 7, No. 3, pp. 207-218.

Mills, C.W. (1959) : *The Sociological Imagination*, New York, Oxford University Press.

Minkler, M. (1977) : Thinking the Unthinkable : The Prospect of Compulsory Sterilization in India, *International Journal of Health Services*, Vol. 7, No. 2, pp. 237-248.

Mishra, B.D., Ali Ashraf, Ruth Simmons and George B. Simmons (1982) : *Organization for Change : A Systems Analysis of Family Planning in Rural India*, New Delhi, Radiant Publishers.

Mishra, Nayantara (1984) : *Socialization of Students in a Nursing Training Institution : A Case Study of Safdarjang Hospital Nursing School : M. Phil. Dissertation*, New Delhi, Centre of Social Medicine and Community Health, Jawaharlal Nehru University.

Mitra, A. (1969) : The Small Family Norms and Literacy, *Family Planning News*, Vol. 10, No. 2, p. 6.

Mitra, A. (1974) : Population in India's Development, in Bose, A. et al. (ed) : *Population in India's Development 1947-2000*, Delhi, Vikas Publishing House, pp. 3-28.

Mitra, A. (1977) : The Census of India : Past and Future, in Bose, A. et al. (ed) : *Population Statistics in India*, New Delhi, Vikas Publishing House, pp. 9-18.

Mitra, A. (1978) : *India's Population : Aspects of Quality and Control*, Vol. I and II, New Delhi, Abhinav Publications.

Mitra, A. (1979) : *Personal Communication*.

Muhr, G. (1986) : The State Must Assume the Responsibility of Providing Equal Care for All, *World Health Eorum*, Vol. 7, No. 1, pp. 23-26.

Mukherjee, B.N. (1973) : Family Planning in Haryana and Tamil Nadu, *Social Change*, March-June, pp. 33-45.

Mukherjee, B.N. (1980) : *A Survey of Research in Psychology (1971-76)*, New Delhi, ICSSR.

Mukherjee, Radhakamal (1938) : The Sociological Analysis and Forecast of Population Increase : Presidential Address to the 2nd All India Population and 1st Family Hygiene Conference, *Proceedings*, Bombay, Karnatak Publishing House.

Mukherjee, Ramakrishna (1972) : *Family Planning in Social and Economic Development : Some Points for Discussion*, Calcutta, Indian Statistical Institute.

Mukherjee, Ramakrishna (1973) : Indian Sociological Historical Development and Present Problems, *Indian Sociological Bulletin*, Vol. 22.

Mukerji, D.P. (1961) : Indian Tradition and Social Change, in Saksena, R.N. (ed) : *Sociology, Social Research and Social Problems in India*, Bombay, Asia Publishing House.

Murthy, R.S. and Wig, N.N. (1977) : Place of Mental Health in Public Health Services in India, *Swasth Hind*, Vol. 21, No. 12, pp. 362-365.

Murti, V.V.R. (1970) : *Gandhi : Essential Writings*, New Delhi, Gandhi Peace Foundation.

Mutatkar, R.K. (1984) : *Leprosy : A Challenge to Social Sciences—Keynote Address, XII International Leprosy Congress, February 20-25, 1984, New Delhi*, Poona, University of Poona.

Myrdal, G. (1968) : *Asian Drama : An Inquiry into the Poverty of Nations*, New York, Twentieth Century Fund.

Nagpal, A.K. (1975) : Maintenance and Repair of Hospital Equipment, *NIHAE Bulletin*, Vol. 8, No. 3, pp. 205-212.

Naik, J.P. (1977) : *An Alternative System of Health Care Services in India : Some Proposals*, Bombay, Allied Publisher.

Nandi, A. (1974) : The Non-paradigmatic Crisis of Indian Psychology, Reflection of a Recipient Culture of Science, *Indian Journal of Psychology*, Vol. 49, Part I, pp. 1-20.

Naoroji, Dadabhai, (1962) : *Poverty and Un-British Rule in India*, Delhi, Publications Division.

Narasimha Char, K.T. (1951) : *A Day Book of Thoughts from Mahatma Gandhi*, Calcutta, MacMillan.

Narayan, S. (1970) : *Vinoba : His Life and Work*, Bombay, Popular Prakashan.

National Academy of Sciences (USA) (1973) : *Relationship of Nutrition to Brain Development and Behaviour*, Washington, D.C., National Academy of Sciences.

National Institute of Family Planning (1975) : *Director's Report 1974-75*, New Delhi, National Institute of Family Planning.

National Institute of Health Administration and Education (1968) : *Staff College Course : Prospective and Methodology*, New Delhi, NIHAE.

National Institute of Health Administration and Education (1971) *What It is and What It Does*, New Delhi, NIHAE.

National Institute of Health Administration and Education (1971) : *An Exploratory Study of Integrated Health Services in India : A Report*, New Delhi, National Institute of Health Administration and Education.

National Institute of Health and Family Welfare (1978) : *Evaluation of Community Health Workers Schemes : A Collaborative Study*. New Delhi, NIHFW (NIHFW Technical Report Series No. 4).

National Institute of Health and Family Welfare (1979) : *Repeat Evaluation of Community Health Volunteers Scheme : A Collaborative Study*, Vol. 3, New Delhi, NIHFW.

National Institute of Health and Family Welfare (1984) : *A Collaborative Study of Health Guide Scheme—The Third Evaluation 1984*, New Delhi, National Institute of Health and Family Welfare.

National Institute of Nutrition (1983) : *Annual Report*, Hyderabad, National Institute of Nutrition.

National Malaria Eradication Programme (1976) : Modified Plan of Operations, *National Malaria Eradication Programme, Newsletter*, Vol. 16, No. 11, (A), pp. 8-15.

National Nutrition Monitoring Bureau (1980) : *Report for the Year 1979*, Hyderabad, National Institute of Nutrition.

National Planning Committee, Sub-Committee on National Health (1948) : *Report* (Sokhey Committee Report), ed. by K.T. Shah, Bombay, Vora.

National Planning Committee (1949) : *Report*, Chairman Jawaharlal Nehru, Sec. K.T. Shah, Bombay, Vora, pp. 9-15.

National Sample Survey (1970) : *Tables with Notes on Differential Fertility Rates in Rural Urban Areas*, No. 186, 19th Round, July 1964-June 1965, Delhi, Government of India Press.

Navarro, V. (1976) : *Medicine Under Capitalism*, New York, Prodist.

Newell, K.W. (1975) : *Health by the People*, Geneva, WHO.

Nyswander, D.B. (1967) : The Open Society : Its Implications for Health Educators, *Health Education Monographs*, No. 22, pp. 3-15.

Oommen, T.K. (1978) : *Doctors and Nurses—A Study of Occupation Role Structure*, New Delhi, Macmillan.

Operations Research Group, Baroda (1972) : *Family Planning Practices in India*, Baroda, Operations Research Group.

Opler, M.E. (1962) : Cultural Definition of Illness in Village India, *Human Organization*, Vol. 21, No. 4.

Pai Panandiker, V.A., R.N. Bishnoi and C.P. Sharma (1978) : *Family Planning Under the Emergency : Policy Implications of Incentives and Disincentives*, New Delhi, Radiant Publishers.

Pamra, S. P. (1980) : Tuberculosis Control in Urban Areas, in Rao, K.N. (ed) : *Textbook of Tuberculosis*, New Delhi, Tuberculosis Association of India.

Panikar, P.G.K. (1979) : Resources not the Constraint on Health Improvement : A Case Study of Kerala, *Economic and Political Weekly*, Vol. 14, No. 44, pp. 1803-1809.

Panikar, P.G.K. (1982) : *Inter-sectoral Action for Health—Kerala Study*, Trivandrum, Centre for Development Studies.

Panikar, P.G.K. and Soman, C.R. (1983) : *Kerala's Health Status: The Paradox of Economic Backwardness, and Health Improvement*, Trivandrum, Centre for Development Studies.

Pareek, U. et al. (1972) : *Population, Family Planning and Health Behaviour in India: An Annotated Bibliography*, 3 Vols. New Delhi, NIHAE.

Parker, R.L. et al. (1978) : The Narangwal Experiment on Interactions of Nutrition and Infections: Measurement of Services and Costs and their Relation to Outcome, *Indian Journal of Medical Research*, Vol. 68, Suppl., December, pp. 42-54.

Paul, B.D. (ed) (1955) : *Health, Culture and Community*, New York, Russell Sage Foundation.

Prasad, B.G. (1959) : Certain Considerations of Social Aspects of Health and Disease, *Indian Journal of Social Defence*, Vol. 1, pp. 99-105.

Prasad, B.G. et al. (1960) : A Study of Social Aspects of Tuberculosis in Some Tubercular Families in Lucknow, in *Procee-*

dings of the Sixteenth Tuberculosis Workers Conference, Poona, pp. 218-238.

Programme Evalution Organisation Planning Commission (1960): *A Preliminary Survey Report on the Working of the Research-cum-Action Projects in Environmental Sanitation with Particular Emphasis on Rural Latrines*, New Delhi, Programme Evaluation Organisation.

Qadeer, I. (1975): Ivan the not so Terrible, *Economic and Political Weekly*, Vol. 10, No. 43.

Qadeer, I. (1977) : Reshaping Health Services : A Note on Draft Plan on Rural Health Services, *Economic and Political Weekly*, Vol. 13, No. 23.

Qadeer, I. (1985): Social Dynamic of Health Care: CHW Scheme in Shahadol District, *Socialist Health Review*, Vol. 2, pp. 74-83.

Raina, B.L. (1963): *Family Planning Progrromme: Report for 1962-63*, New Delhi, Ministry of Health and Family Planning.

Raina, B.L. (1968): Family Planning. in *Encyclopaedia of Social Work in India*, (ed) M.S. Gore, Vol. 1, New Delhi, Planning Commission, p. 311.

Raj Narain et al. (1963): Some Aspects of a Tuberculosis Prevalence Survey in a South India District, *Bulletin of World Health Organization*, Vol. 29, pp. 641-644.

Raj Narain et al. (1968): Problems in Defining a 'Case' of Pulmonary Tuberculosis in Prevalence Surveys, *Bulletin of World Health Organization*, Vol. 39, pp. 701-729.

Ramaiah, T.J. et al. (1971): *Report of the Study of Emergency and Casualty Department in Irwin Hospital*, New Delhi, NIHAE (NIHAE Research Report No. 8).

Ramaiah, T.J. (1976): Cost-effectiveness Analysis of the Intensified Campaign Against Smallpox in India *NIHAE Bulletin*, Vol. 9, No. 3, pp. 205-219.

Ramaiah, T. J. (1980): *Cost Benifit Analysis of Malaria Control and Eradication Programme in India*, Ahmedabad, Indian Institute of Management.

Ramalingaswami, P. (1980): Role of Specialisation in Medical Students Preferences, *Indian Journal of Medical Education*, Vol. 19, No. 1, pp. 41-44.

Ramalingaswami, P. et al. (1972a): Leadership Style and Motivational Orientation of Undergraduate Medical Students, *British Journal of Medical Education* Vol. 6, pp. 218-223.

Ramalingaswami, P. et al. (1972b): Aspirations and Apprehensions, Hopes and Fears of Undergraduates Students in Indian Medical College, *Indian Journal of Medical Education*, Vol. XI, pp. 305-314.

Ramalingaswami, P. et al. (1972c): Undergraduate Medical Students, their Curricular Preference, Motivation Orientation and Leadership Style, *Indian Journal of Psychology*, Vol. 7, pp. 393-404.

Ramalingaswami, P. et al. (1973): *Medical Students Image of Preventive and Social Medicine and Public Health and Community Health*, New Delhi, NIHAE (NIHAE Research Report No. 14).

Ramalingaswami, P. (1984): Estimation of Cost of Medical Education in India, *Indian Journal of Medical Education*, Vol. 23, No. 1, pp. 68-90.

Ramasubban, R. (1982): *Public Health and Medical Research in India: Their Origins Under the Impact of British Colonial Policy*, Sweden, SAREC (SAREC Report R. 4:1982).

Rand, W.M. and Scrimshaw, W.S. (1984) : Protein and Energy Requirements—Insights from Long-term Studies, *Bulletin of the Nutrition Foundation of India (NFI Bulletin)*, Vol. 5, Vol. 4, pp. 1-2.

Rao, G.R. (1928) : *Ind. Med. Gaz.*, Vol. 63, pp. 568-573.

Rao, K.G. (1974) : *Studies in Family Planning : India*, New Delhi, Abhinav Publications.

Rao, K.V. (1982) : *Study of Leprosy Control Programme in Rural Population in Chingleput District : A Ph.D. Thesis*, New Delhi, Centre of Social Medicine and Community Health, Jawaharlal Nehru University.

Rao, S.K. (1976) : Population Growth and Development : A Counter Argument, *Economic and Political Weekly*, Vol. 11, Nos. 31-33, Special No., pp. 1149-1158.

Rao, V.K.R.V. (1981) : Measurement of Poverty : A Note, *Economic and Political Weekly*, Vol. XVI, No. 35, August 29, pp. 133-1436.

Ray, D.B. (1974) : A Study of the Opinions of Patients to Measure Level of Satisfaction, *NIHAE Bulletin*, Vol. 7, No. 3, pp. 171-185.

Raye, Santa (1982) : *A Study of Interaction Between Integrated Child Development Services Scheme and the Community in Three Anganwadis of the Tribal Development Block at Subdega in District Sundergarh, Orissa* : M. Phil, Dissertation, New Delhi, Centre of Social Medicine and Community Health, Jawaharlal Nehru University.

Rogers, E.M. (1948) : Categorising the Adoptors of Agricultural Practices, *Rural Sociology*, Vol. 23.

Rogers, E.M. (1965) : *Diffusion of Innovations*, New York, The Free Press.

Rosen, G. (1958) : *History of Public Health*, New York, M.D. Publications.

Rosen, G. (1985) : *Western Economists and Eastern Societies : Agents of Change in South Asia*, New Delhi, Oxford University Press.

Rosenstock, I.M. (1959) : *Public Participation in X-ray Screening Programme*, USPHS.

Ross, R. (1926) : *Malaria Control in Ceylon Plantations : Report of Ceylon Medical Association*, London.

Roy, B.C. (1982) : Future of the Medical Profession in India: Reprint of Presidential Address at the All India Medical Conference, Lahore, December 1929, *Journal of Indian Medical Association*, Vol. 78, pp. 24-30.

Roy Burman, B.K. (1974) : Critique of Maurice Freedman's Report on Social and Cultural Anthropology, *Man in India*, Vol. 54, No. 2, pp. 130-144.

Rural Health Research Centre, Narangwal (1972) : *Interactions of Nutrition and Infection Narangwal*, Rural Health Research Centre.

Rural Health Research Centre, Narangwal (1975) : *The Narangwal Population Study : Integrated Health and Family Planning Services*, Narangwal, Rural Health Research Centre.

Ryle, J.A. (1948) : *Changing Disciplines*, London, Oxford University Press.

Sahu, S.K. (1980) : *Health Culture of Oraons of Rourkela and its Hinterland : A Ph.D. Thesis*, New Delhi, Centre of Social

Medicine and Community Health, Jawaharlal Nehru University.

Sand, R. (1980) : *The Advance to Social Medicine*, New York, Staples Press.

Sanjivi, K.S. (1976) : Mini Health Centres Project of the Voluntary Health Services Medical Centre, Madras, in Indian Council of Medical Research : *Alternative Approaches to Health Care : Report of a Symposium Organised Jointly by ICMR and ICSSR*, New Delhi, ICMR, pp. 149-162.

Schenk, L. (1979) : Caste, Poverty and Disease : Some Observations in an Indian Town, in Van der Geest, S. and Van der Veen, K.W. (ed), *in Search of Health : Essays in Medical Anthropology*, Amsterdam, University of Amsterdam, 131-143.

Sharma, P.D. and Sharma, Monica (1982) : An Approach to Health Planning in India via Computer Simulation of Epidemiological Models : A Case Study of Tetanus, *Health and Population : Perspectives and Issues*, Vol. 5, No. 3, pp. 139-167.

Shukla, C. (1956) : *Gandhi's View of Life*, Bombay, Bhartiya Vidya Bhavan.

Sidel, V.W. and Sidel, R. (1975) : The Health Care Delivery System of the People's Republic of China, in Newell, K.W. (ed): *Health by the People*, Geneva, World Health Organization, pp. 1-12.

Sigerist, H.E. (1943) : *Civilization and Disease*, Ithaca, New York, Cornell University Press.

Sigerist, H.E. (1961) : *History of Medicine*, New York, Oxford University Press.

Sikand, B.K. and Raj Narain (1967) : Known and Unknown Cases of Pulmonary Tuberculosis in a Population, *Indian Journal of Tuberculosis*, Vol. 5, pp. 3-10.

Simmons, G.B. (1971) : *The Indian Investment in Family Planning*, New York, Population Council.

Singh, B. (1955) : *Frontiers of Social Sciences: Essays in Honour of Radhakamal Mukerjee*, London, Macmillan.

Singh, B. and Singh, V.B. (ed) (1967) : *Social and Economic Change: Essays in Honour of D.P. Mukerji*, Bombay, Allied.

Singh, K. (1957) : *Population, Poverty and the Future of India*, New Delhi, National Institute of Family Planning.

Singh, M.M. and Banerji, D. (1968) : A Follow up Study of Patients of Pulmonary Tuberculosis Treated in an Urban Clinic, *Indian Journal of Tuberculosis*, Vol. 15, pp. 157-164.

Singh, S.J., E. Gordon and J.B. Wyon (1962) : Medical Care in Fatal Illnesses in a Rural Punjab Population : Some Social, Biological and Cultural Factors and Their Ecological Implications, *Indian Journal of Medical Research*, Vol. 50, pp. 865-880.

Singh, Y. (1963) : The Role of Social Sciences in India : A Sociology of Knowledge, *Indian Sociological Bulletin*, Vol. 22, pp. 14-28.

Sinha, Durganand (1983) : *Place and Role of Psychology in the Context of Third World Development with Special Reference to India*, Patna, ANS Institute of Social Studies.

Sinha, S. (1971) : Is There an Indian Tradition in Socio-cultural Anthropology, Retrospect and Prospect, *Journal of Indian Anthropological Society*, Vol. 6, p. 1-14.

Sinha, S. (1972) : *Aspects of Indian Culture and Society: Essays in Felicitation of Nirmal Kumar Bose*, Calcutta, Indian Anthropological Society.

Sinton, J.A. (1938) : *What Malaria Costs India*, Health Bulletin No. 26, Malaria Bureau No. 13, Simla, Government of India Press, p. 121.

Sorokin, P.A. (1956) : *Facts and Figures in Modern Sociology and Related Sciences*, Chicago, Henry Regnery.

Sri Lanka, Ministry of Health (1981) : *Improvement to Health Care Delivery System*, Colombo, Ministry of Health.

Srinivas, M.N. and Ramaswamy, E.A. (1977) : *Culture and Human Fertility in India*, Delhi, Oxford University Press.

Srivastava, A.B.L. and Gupta, J.P. (1974) : A Review of the Indian Studies on Cost Analysis in Health, *NIHAE Bulletin*, Vol. 7, No. 1, pp. 29-56.

Stycos, J.M. (1962) : A Critique of the Traditional Planned Parenthood Approach in Underdeveloped Areas, in Kiser, C.V. (ed) : *Research in Family Planning*, Princeton, N.J., Princeton University Press.

Sukhatme, P.V. (1978) : Assessment of Adequacy of Diets at Different Income Levels, *Economic and Political Weekly*, Vol. 12, Nos. 31-33, Special No., pp. 1373-1384.

Sukhatme, P.V. (1980) : Nutrition Policy : Need for Reorientation, *Economic and Political Weekly*, Vol. XV, No. 26, June 28, pp. 1101-1105.

Sukhatme, P.V. (1981a) : Measuring the Incidence of Undernutrition : A Comment, *Economic and Political Weekly*, Vol. XVI, No. 23, June 6, pp. 1034-1036.

Sukhatme, P.V. (1981b) : On Measurement of Poverty, *Economic and Political Weekly*, Vol. 16, No. 32, pp. 1318-1394.

Sukhatme, P.V. (1982) : Measurement of Undernutrition, *Economic and Political Weekly*, Vol. 17, No. 30, pp. 2000-2016.

Swami S. (1974) : Population Growth and Economic Development, in Bose, A. et al. (ed) : *Population in India's Development, 1947-2000*, Delhi, Vikas Publishing House, pp. 211-219.

Tagore, R. (1961) : *On Rural Reconstruction*, New Delhi, Ministry of Community Development and Cooperation.

Takulia, H.S. et al. (1967) : *The Health Centre Doctor in India*, Baltimore, Johns Hopkins Press.

Taylor, C.E. et al. (1967) : *Doctor for the Villages : Study of Rural Internships in Seven Indian Medical Colleges*, Bombay, Asia Publishing House.

Taylor, C.E. et al. (1978) : The Narangwal Experiment on Interactions of Nutrition and Infections—Project Design and Effects Upon Growth, *Indian Journal of Medical Research*, Vol. 68, (Suppl). December, pp. 1-20.

Taylor, C. (1981) : The Role of Hospitals in Conducting and Supporting Health Services Research : Keynote Address, in Aga Khan Foundation : *Proceeding of the Conference on Role of Hospitals in Primary Health Care*, Karachi, Aga Khan Foundation, pp. 39-46.

Tewari, R.N., P.C. Jain, B.G. Prasad, (1969) : A Medico-Social Study of Pulmonary Tuberculosis in Marti Village, Lucknow, *Indian Journal of Medical Research*, 57, pp. 2283-2288.

Timmappaya, A. (1971) : *Patient Satisfaction and Ward Social System*, New Delhi, NIHAE (NIHAE Research Monograph 1971).

Timmappaya, A. (1972) : *Research in District Health Administration*, Rohtak, New Delhi, National Institute of Health Administration and Education.

Timmappaya, A. et al. (1974) : *Measuring Patient Satisfaction in a General Hospital*, New Delhi, NIHAE.

Trakroo, P.L. et al. (1977) : Reaction of Patients Towards the Evening OPD Services in Hospitals of Delhi, *NIHAE Bulletin*, Vol. 10, No. 4, pp. 293-302.

Trakroo, P.L. and Kapoor, S.D. (1981) : *Medical Sociology in India : A Perspective for 1980's* New Delhi, NIHFW.

Tuberculosis Chemotherapy Centre, Madras (1959): A Concurrent Comparison of Home and Sanatorium Treatment of Pulmonary Tuberculosis in India, *Bulletin of the World Health Organization*, Vol. 29, p. 5.

Turshen, M. (1981): The Political Ecology of Disease, *Health Bulletin*, No. 1, pp. 1-39.

Tyabji, N. (1986): Dale Carnegie Inc: Review of George Rosen: Western Economists and Eastern Societies: Agents of Change in South Asia, 1950-1970, *Economic and Political Weekly*, Vol. 21, No. 10 and 11, pp. 432-435.

United Nations Advisory Mission (1966): *Report on the Family Planning Programme in India*, New York, United Nations.

United Nations (1968): *International Action to Avert the Impending Protein Crisis*, New York.

United Nations and Government of India (1961) : *The Mysore Population Study*, New York, United Nations, Department of Economic and Social Affairs (Population Studies No. 34).

University of Delhi, Faculty of Management Studies (1986): *Management Programmes*, Delhi, University of Delhi.

Valentine, C.A. (1972): *Culture and Poverty: Critique and Counter Proposals*, Chicago, The University of Chicago, Press.

Van der Geest, S. and Van der Veen, K.W. (ed) (1979): *In Search of Health: Essays in Medical Anthropology*, Amsterdam, University of Amsterdam.

Van der Veen, K.W. (1979): *Socio-cultural Factors in TB-Care : A Case Study in Valsad District, Gujarat*, Amsterdam, University of Amsterdam.

Valentine, C.A. (1972): *Culture and Poverty: Critique and Counter Proposals*, Chicago, The University of Chicago Press.

Vyasulu, V. and Padaki, V. (1976): *On the Environment and Social Issues*, Bangalore, Indian Institute of Management.

Walsh, J.A. and Warren, K.S. (1979): Selective Primary Health Care: An Interim Strategy for Disease Control in Developing Countries, *New England Journal of Medicine*, Vol. 30, pp. 964-967.

Wattal, P.K. (1916): *The Population Problem in India*, Bombay, Bennet, Coleman.

World Health Organization (1964): *Report of the WHO Expert Committee on Tuberculosis—Eighth*, Geneva, WHO (WHO Technical Report Series No. 290).

World Health Organization and UNICEF (1978a): *Primary Health Care: Report of the International Conference on Primary Health Care*, Alma-Ata, USSR, September 6-12, 1978, Geneva, WHO (WHO Health For All Series No. 1).

World Health Organization (1978b): Health Education with Special Reference to the Primary Health Care: A Background Document of the WHO Regional Office for the Eastern Mediterranean, *International Journal of Health Education*, Vol. 21, No. 2, pp. 1-19.

World Health Organization (1983): *Report of the Expert Committee on New Approaches to Health Education in Primary Health Care*, Geneva, October 12-18, 1982, Geneva, WHO (WHO Technical Report Series No. 690).

Wyon, J.B. (1957): Motivation for Family Planning, with Special Reference to Field Studies, in *Proceedings: Third All India Conference on Family Planning*, Calcutta, Family Planning Association of India.

Wyon, J.B. (1960): Why do People have so many Babies? *Frontier*, Vol. 1, p. 62.

Wyon, J.B. and Gordon, E. (1971): *The Khanna Study: Population Problems in the Rural Punjab*, Cambridge, Harvard University Press.

Zurbrigg, S. (1984): *Rakku's Story: Structures of Ill-health and Source of Change*, New Delhi, Voluntary Health Association of India.

Index

Abdur Rehman, Col. S. 23, 24, 133, 153
Abel Smith 75
above down approach 96
access as a weapon of oppression 128, 137
action feed-back phase 34
action, awareness, 98
additional social science knowledge needed 135-139
administrative fiat to solve nutrition 72
Administrative Staff College 68, 85
Adoption model, implantation of 49, 56
Ajmal Khan Hakeem 23, 24
alleviation of physician 124
Alma-Ata Declaration 7, 103, 127
All India Contraceptive Survey 56
All India Health Education Conferences 47, 48
All India Institute of Hygiene and Public Health 36, 37, 48, 63, 83
All India Medical Conference 23
All India Institute of Medical Sciences 69, 74
All India Institute of Mental Health and Neurosciences 74
All India Women's Conference 106
allocation pattern 76
alternative approach to HE 51, 94-97, 102, 150
alternative comprehensive social science approach 123
alternative concepts 95
alternative conceptual approach 83
alternative health service system 80, 85, 128, 129
alternative methodological approach 83
alternative paradigm 146-150
Alternate School of Social Science 20
American tradition 29, 146
Amin, Samir 111
Amrit Kaur, Raj Kumari 136
Andersen & Banerji 142
Andreski, S.C. 12, 146
Andersen, Stig 97, 101, 145
Ansari, A.R.D. 23
anthropology 85
anthropological analysis of indigenous health culture 138
anthropological field work 117
anti-colonial struggle 4, 12, 22, 138
Annual Conferences on Rural Internship 41
Area Projects 60
asking right questions 140
assessment 87-91
“atypical” social scientists 97
aura of legitimacy 18, 90, 133
autobiographical account of Ghurye 146
awareness study methodology 141, 142
Ayurvedic and Unani Tebia College 24
Ayurvedic system 22, 23
balanced approach to FP 107
Bandhan, P.K. 109
Banerjee, Sumanto 59, 109

Banerji, D. 4, 5, 6, 8, 9, 11, 18, 20, 23, 49, 52, 54, 55, 56, 57, 66, 72, 75, 79, 80, 89, 101, 108, 111, 112, 113, 114, 116, 123, 125, 126, 127, 128, 129, 130, 131, 132-150

Banerji and Andersen 98, 142

Banerji Debobas 97

bare-foot doctors 80

battery of questionnaires 41

Benjamin, P.V. 97, 136

Bergstrom, S. 111

Bhandari, R.L. 59, 109

Bhave, Vinoba 16

Bhore Committee 12, 24, 107, 133, 153

bias in knowledge 90

biological implication of poverty 119

blindness 13

bogy of population growth 112

Boland and Young 7

Bombay sex habit study 90, 146

Borremans, V. 80, 134

Bombay University, Department of Sociology 106

Bondestam, 111

borrowing from Western Countries 29

Bose, Asish 60, 109

Bose Nirmal Kumar 16, 36, 89

break with tradition 16, 29

Brown and Margo 49, 50, 51, 90

Brown, Richard 132

bureaucratic behaviour change 91, 96, 100

Bucharest Conference 109, 111

bypassing medical establishment 125

Carstairs, M.G. 30, 31, 34, 61, 74, 90, 138

case finding and case holding 66, 103

caste and class 121

“catching” people 98

Census Report 106

Central Family Planning Institute 38, 53, 154

Central Family Planning Training Institutes 53, 84

Central Health Education Bureau 37, 47, 48, 84, 154

Center of Social Medicine and Community Health 80, 86, 122

certificate course in health education 48

Chakraborty 83

child mortality 13

child survival 7, 8

Chandrasekharan and Kuder 52

China 4, 80

choice of technology 8

Christian Medical College Ludhiana, Department of PSM 39, 41

Christophers 76, 77

Church Mission Society, London 62

class bias 11, 13

Cleaver, Harry 131

clinic approach 18, 52

colonial pattern 14

colonial pattern of health culture 137

colonial rule 4

communicable diseases 7, 13, 17, 88

communication action research 56

Community Development Programme 12

Community health and hospitals 127

Community Health Workers 13, 24, 125, 126, 139

Community Involvement 3, 8, 14

Comprehensive reference frame 9

concept of felt need 98

Conceptualization of a problem 140

Conference of Social Scientists, 1956 35, 88, 116, 154

constructive programmes 15

control of access 120

Conventional approach to health education 57
Conventional School of Social Sciences 20
Conventional Social Sciences—atheoretical, ahistorical, apolitical 46
coping capacity 22, 99
cosmology of villagers 32
cost analysis of medical education 78
cost-benefit analysis 77
cost effectiveness 99
conscious awareness 98
counter productive forces 11, 12, 13
counter productive social sciences 6, 47, 90, 155
creation of distorted knowledge 130
creative thinking 91
Cuba 4
cultural accretion 81
cultural aspects of Health 3
cultural aspects of health services 3
cultural deprivation 122
cultural diffusion 148
cultural dimensions of health 61
cultural-gap 14
cultural innovation 148
cultural meaning 3, 5
cultural perception 3, 5
cultural, social and biological dimensions of hunger 72
customs beliefs and practices 62
culture 95
culture of mediocrity 89, 90-91

Dandekar & Rath 6, 71
Dandekar V.M. 72
Das Gupta, A. 77
de Bernis 77, 78
decentralised democratic polity 15
decline in TB specialization 99
defaulter—epidemiological and sociological definition 102
defaulter—traditional definition 102

defects in conceptualisation of research 89
defects study design 89
deformities in Leprosy 66
degradation of life 120
Delhi School of Social Work, D.U. 70
Demerath N.J. 30, 53, 54, 110, 112
Democratisation 4, 12, 15, 17, 128, 137, 138, 153
Demographic Advisory Committee 53
Demographic and Communication Research 53
Demographic Research Centre 84
de-mystification 99
dependency 29, 56
Deppe 134
de-professionalization 99
Desai, A.R. 59, 108
Desai, I.P. 20, 30
Desai, P.B. 109
development is the best Contraceptive 18, 109
Dey, S.K. 36, 116
Dhillon, H.S. 48, 65, 66
Dhillon & Kar 56, 65, 89
diagnostic studies, 58
diarrhoeal diseases 13
Diploma in Health Education 48
disabling and addictive 29
Directive Principles of Constitution 113
diseases of poverty 120
Distribution of power 3
District Health Organisation Study 62, 75, 78
—Diagnostic study 62
—manipulative stage 62
distortion of scientific knowledge 149
District Tuberculosis Centre, Valsad 67
diversion of attention 50
Djurfeldt, and Lindberg 110, 122, 138, 144
doctors in villages 42
documentation of poor scholarship 89

Dube, S.C., 20, 30, 36
 Dubos, R 133
 Dubose and Dubose 100
 Dutt, R.C. 16
 dynamics of felt needs 99

early efforts 22
 early initiatives from US scholars 29
 Eckholm, Eric 132
 ecological background 5
 ecology, human 95
 economic equity 16
 economic justice 15
 economics of population control 78
 economics of tuberculosis 77
 Eleventh International Conference on Health Education 57
 Elling, R.H. 139, 147
 Emergency 1975-77, 18, 19, 55, 104, 113
 emerging contradiction 125
 endogenous paradigm 147, 150-153
 endogenous social science knowledge 16
 environmental conditions 7
 epidemiological approaches 8
 epidemiological strategy 99
 epidemiological approach to hospitals 127
 epidemiologically effective 83, 155
 epidemiology 83
 escalating cost of medical care 75
 escalating pressure 55
 Essays on Medical Anthropology 68
 ethno-centric 39
 evaluation of C.H.V. scheme 62
 Recommendations 63
 Weaknesses in the data 64
 expansion of Social Sciences 29
 expectations of life at birth 6
 extension approach 18, 52

facade and reality 126

failure of family planning 114
 failure of social scientists 88
 fallacies in concepts and methods 120
 Family Planning Communication Motivation Action Research 53, 84
 family planning communication policy 109
 Family Planning Foundation of India 58
 family planning outreach, 114
 Family Planning Programme 18, 47, 52, 105-115
 family planning systems 88
 family planning targets 55
 Feldstein, M.S. 77
 felt need 148
 Field, M. 37
 ferment in rural areas 121
 Fifth Health Education Conference 50, 53
 Folk and Morden Medicine 43
 food and drug industry and nutrition research 74
 Ford Foundation 30, 37, 44, 48, 52, 53, 59, 61, 68, 83, 110, 154
 Foreign scholars 11, 46, 56
 dependence on 11, 12, 53
 formation of institutions 95
 formation of knowledge 94, 95
 foreign agencies, role of 105
 Foster, George 91, 96, 100, 147
 Foucault, M. 134
 foundations of an alternative approach 66
 foundations of health services 135-139
 Freedom Struggle 15
 Functional Analysis Research Project 40, 42, 43

Gandhi, M.K. 15, 22, 73
 Gandhian movement 16
 Gandhigram Rural Health Training Centre 36, 40, 83
 Ganguli, B.N. 15, 16, 106, 109

Galdston, Iago 133
General Medical Council of Great Britain 124
Ghurye, G.S. 90, 106
global balance of power 4
go to the people and learn from them 155
GOBI 7
Gopalan and Narasingarao 130
Gopalan, C. 71
Gordon, John 33
Gore, M.S. 36
Gothi, G.D. 100, 102
Gould, H.A. 62, 138
Grant, J.P. 7
Grant, John 133
Grigg, E.R.N. 100
group dynamics 68
Gunnarsson, Bo 111
Gupta, P.B. 10, 114
Gyanchand 16, 106

Harvard Department of Social Psychology 41
Harvard Group 33, 37, 68, 87, 96, 97, 106, 107, 110
Harvard population activities 33
Harvard School of Public Health 32, 39, 51, 52, 57, 84, 154
Hasan, K.A. 61, 138
Haryana & Tamil Nadu Fertility Survey 56
health administration 10, 62, 83
health as a lever for social change 129
health as an entry point 129
health behaviour 17, 61, 62, 86, 115-123
health behaviour : conceptual issues 116
health behaviour : methodological issues 116, 117
Health by the People 4
Health Centre Doctor of India 42
health culture 99, 116, 118
Health, Culture and Community 32, 95, 96

health economics 11, 17, 75-79
health education 17, 47, 88, 154
health education, new approaches 100, 103-105
health education practice, assessment 49
health institutions 3, 5
health insurance 75
health manpower development 13, 85, 86
health practices 3, 5
health profession 17
health service development 10
health service system 10
health status 4
health status in Kerala 132
health systems development 17
health systems research for HMD 126
heirarchy of health needs 120
hewers of wood and . . . 131
historical analysis 138, 150
historical background 5
history of social sciences in India 36
historical perspective 115
Hofsten, E. 111
hospital administration 17, 64, 65, 86, 89, 124, 127
hospital as a social system 127
hospital costs 75
housing 7
human capital formations 78
human fertility 88
hygiene and health 16

ICSSR-ICMR Study Group 87
 conclusion 81, 85
ideology of population control 110
Illich, Ivan 6, 29, 80, 134
Illsley, Raymond 147
image of family planning 104
image of primary health centers 117
immunization 118

imposition on Third World 30, 57, 90

indigenous systems of medicine 12, 23, 132

indepth anthropological investigation of tuberculosis 67

India Population Project-I 59, 68

India Population Project-II 60, 68, 111

Indian Council of Medical Research 6, 62, 87

Indian Council of Social Sciences Research 6, 85, 87
—Review Committee 30, 80

Indian Institute for Research in Medical Statistics 63

Indian Institute of Management, Ahmedabad 63, 68, 85

Indian Institute of Management, Bangalore 68, 85

Indian Institute of Management, Calcutta 68, 85

Indian Institute of Public Administration 68

Indian Institute of Technology, Bombay 85

Indian Medical Association 23

Indian National Congress 22

Indian scholars 46, 91

indices for health 6

infant mortality 13

influence of food and drug industry 130

influence of market forces 130

Information, Education and Communication 111

Institute of Economic Growth, DU 69

institution for social sciences in health 83-86

institutionalisation of social sciences in health 87

Integrated Child Development Programme 123
— and people 123

Integrated Health Services Study 18, 84, 88

integration of health services 7

integration of tuberculosis programme 98

intellectual stature of social scientists 146

internal functioning of hospitals 127

intrinsic dynamism 4, 115

intensified family planning drive 18, 19, 104, 113

Interaction of Family Planning and MCH Project 40, 43

Interaction of Nutrition and Infection Project 40, 43

interdisciplinary approach 10, 34, 45, 75, 101, 108, 126

International Planned Parenthood Federation 52, 110

interpersonal competence 10

inter-sectoral action 7

Intra-Uterine Device 18

interests of business corporation 132

intrinsic dynamics of forces 4, 5, 121

intrinsic social forces 4, 25

investment in NTP 100

involvement of social scientists in Narangwal 39-44

Iran, rural latrines 96

IUD camps 54

Jawaharlal Nehru University 80, 86

Jeffery, Roger 134

Jobert, B. 125

Johns Hopkins School of H & PH
Division of International Health 40

Joshi, P.C. 109

Kakar, D.N. 43

Kakar, V.N. 52

Kapoor, R.L. 74

K.A.P. Studies 48, 49, 55, 56, 104, 108, 144

Kerala 6, 75

- Demographic changes 6, 7, 132
- K.G. Medical College PSM Deptt. 61
- Khan Saheb, Dr 23
- Khanna Study 38, 46, 51, 70, 84, 108, 144
- Khare, R.S. 62, 138
- Kishan Garhi 31
- Kipling, Rudyard 31
- knowledge base 1
- knowledge, distortion of 19
- Kota Study 74
- Krishnamurthy, K.G. 56
- Krishnaji, N. 71
- Kumarappa, Bharatan 16
- Kumarappa J.C. 16, 29
- Kuppuswami, T.N. 64, 79
- lack of sound foundation 90
- Law of Higher Weights 12
- Leavell, Hugh 32, 33, 34, 35, 37, 38, 61, 62, 68, 154
- Leprosy Control Programme 123
- Leprosy 13, 22, 66, 103
- Litwin, George 41, 140
- Levin, Lowell 134
- Lewis, Oscar 45
- limits to health development 5
- Lippes IUD 54
- Luck, et al 101, 145
- Machiavellian thinking 32
- Madan, T.N. 69
- Madhya Pradesh field work 125
- Madlebaum, David 45, 58
- Mahler, H.T. 11, 51, 97, 103, 136, 150
- Majumdar, D.N. 36
- malaria control 131
- maintainance of political *status quo* by health education 51
- Malthusian School 107, 109, 111, 112, 114, 149
- Mamdani, Mehmood 39, 108, 111, 144
- management science imputs 68
- managerial physicians 126
- managerial process 9, 103
- mandate for NTI 97
- Mankodi and Van der Veen 67
- Maru, R. 68
- Mani, C. 36
- Marriot McKim 30, 31, 34, 61, 68, 90, 138
- Mass B.C.G. Campaign 18
- mass communication 8, 51, 52, 55, 57, 104
- Mass Vasectomy Camp 18, 112, 113, 114
- maternal and child health 17
- maternal mortality 13
- Mathews, C.M.E. 62, 122, 144
- McClelland, David 41, 45, 140
- McDermott, Walsh 6, 133
- McGavran, Edward 38, 62
- McKeown, T. 6, 133
- McKinlay, 46, 147
- McKnight, J.L. 134
- measurement of intellegence 73, 131
- measurement of undernutrition 130
- media 109
- medical anthropology 11
- Mehta, Jeevraj Dr 23-24
- mental health 74, 88
- mental retardation and severe mal-nutrition 73, 130, 150
- epidemiological, embryological, psychological and political issues 73
- effect on cohorts 73
- messages 109
- method as a straitjacket 140
- methodological developments 140-145
- methodological innovations 155
- methodology of cost-benefit analysis 78
- methodology of health behaviour study 142
- methodology of social study of leprosy 143

methodology of study of socialisation 143

methodology of ICDS study 143

methodology of Oraon study 142

methodology of treatment default study 142

medical catastrophes 120

Medical Council of India 124

medical education 17, 69, 80, 87

medical profession 69

medical sociology 11

Mills, C. Wright 146

Mini Health Centres 79

Minkelar, Meredith 110

Mishra et al 58, 59, 75, 145

Mishra, Nayantara 70, 143

Mitra, Asok 59, 107, 108, 109, 114

Moarafi, A. 51

modes of production 3, 5

monetary incentives 55

motivational manipulation 50, 51, 55, 57, 104, 111, 155

motivation for family planning 108

motivation, generation of 104

Mudaliar Committee 79

Muhr, G. 75

Mukerji, D.P. 16, 29

Mukherjee, Bishwa Nath 20, 29

Mukherjee, Radhakamal 16, 30, 106

Mukherji, R.K. 20, 58, 108

multi-purpose workers 12, 18

Murti, V.V.R. 16, 22

Mutatkar, R.K. 66, 103

Myrdal, G. 12, 13, 108, 114

Mysore Population Study 56

Naik, J.P. 80

Nandi, Asis 30

Narayan S. 16

Narangwal Studies 39-44, 46, 69, 70, 84

National Academy of Sciences USA 131

nationally applicable programme 83, 155

National Filaria Control Programme 18

National Health Sub-committee 23

natural history of a health problem 147

National Institute of Health Administration and Education 37, 38, 53, 68, 75, 83, 111, 154

National Institute of Health and Family Welfare, 63

National Institute of Nutrition 63

National Movement 137, 138, 139, 153

National Malaria Education Programme 18, 77, 131

National Nutrition Monitoring Bureau, 71

National Planning Committee 12, 23, 24, 80, 106, 132, 143

National Smallpox Eradication Programme 18, 64

National Sample Survey 66

National Symposium on Alternative Approaches 81

National Trachoma Control Programme 18

National Tuberculosis Programme 66, 75, 83, 96, 97, 100, 101, 102, 135

naturopathy 22

Naoroji, Dadabhai 16

Navarro, V. 134, 147

Nayar Sushila 25, 41, 48, 50

New Public Health 11, 150

Newell, K.W. 4

Nehru, Jawaharlal 97, 136

Nineteen Village Study 117-122

North Carolina School of Public Health 38

nutrition 12, 70, 122

nutrition education 74

nutrition studies 129-131

Nyswandar, Dorothy 50, 51

obituary to HE, 51

obsession with techniques 110

one-way flow of knowledge 93

Oomen, T.K. 70, 90
operational research 101, 114, 144, 145
Operations Research Group 55, 63, 83
Opler, Morris 62
opposing forces in manpower development 124
opposing pulls 15
Oraon Tribal Community 122
Organisational and management system 148
organisational behaviour 17, 68

Pai Pannandikar, V.A. 59
Pakistan's Harvard Advisory Group 54
palpable defects 87
Panikar, P.G.K. 75, 132
parallel movement in health social sciences 97, 104, 148, 150, 155
Pareek et al 56
Pataudi Block 50
patients in hospitals, 3
Patients Satisfaction and World Social System Study 64
Paul Benjamin 32, 33, 61, 68, 138
people as manpower resource 126
people's health to people's hand 12, 19, 63, 81, 125, 139
people oriented programme 123
people oriented technology 148, 155
personal interview of key social scientists
PL 480 studies 40
Planning Action Research Institute Lucknow 36, 48
political action 8
politics and health 149
political commitment 8
political economy of population control 112, 113
political economy of health 17
political economy of MCH 132
political economy of under-nutrition, nutrition programme and nutrition research 71

political forces 9
political implications of hunger 72, 73
political implications of mental retardation thesis 73
political impotence in FP 110
politics of insecticide supply 131
political issues 6, 128-134
political leadership 13
political motives 7
political organisation 3
political potential of a concession 128
political potential of knowledge 130
political process 19, 103, 121
political significance of suffering alleviation 129
political struggle 5
political system 8
political workers and health workers 129
political will 8
population and poverty 104, 109
Population Center of IPP-1 63
population control 53, 122
Population Council of India 55
Population Council of US 154
Population Crisis Committee 110
population growth 13, 44
population growth as weapon of the oppressed 113
population policy of 1976 112
Population Research Centre 85
Post-Graduate Institute of Medical Education and Research 74
poverty, dependency, ill-health dynamics 122
power structure 12, 121, 126
precision in diagnosis 101
pre-determined technology 94
pre-existing health culture 150
preventive services, allocations 18
preventive services 4
Primary Health Centers 12, 17, 18, 139

- primordial need of hunger satisfaction 72
- process of generation of motivation 57
- professionalisation 86
- professionals and semi-professionals 70
- profiles of poverty 72, 119, 121
- progress in health and family planning 19
- promotive services 4
- psychology 85
- public administration 62, 83
- purposive intervention 4, 116, 117, 148, 150
- Qadeer, 125**
- quantitative dimension to qualitative work 117
- Raina, B.L. 52, 106**
- Raj Narain 98, 102
- Rajwade, Laxmibai 132
- Ramaiah, T.J. 65
- Ramalingaswami, P. 69, 78, 79
- Ramasubban, R. 134
- range of normality in nutrition 71
- Rand and Scrimshaw 72
- Rao, G.R. 76
- Rao, K.G. 55, 59, 89
- Rao, K.V. 123, 143
- Rao, S.K. 77
- Rao, V.K.R.V. 71
- Ross, R. 76, 77
- Ray, D.B. 64
- Raye, Santa 123, 143
- readymade methodological module 140
- Registered Medical Practitioners 118
- Regional Advisory Committee on Medical Research SEARO 69
- Regional Family Planning Training Centres 53, 84
- rehabilitative services 4
- relevance and validity of social sciences 35
- research-action-evaluation 34
- research design 140
- research questions 97
- research in health education 48
- research techniques 140
- Research-cum-Action Project, 33, 37, 39, 46, 48, 53, 84, 97
 - Najafgarh 34
 - Singur 34
 - Poonamallee 34
 - health engineering 34
 - health education 34
 - social sciences 34
 - objectives 34
- review of social science studies in health 89
- Rockefeller Foundation 30, 37, 44, 110, 132, 154
- Rogers, E.M. 49
- Rosen, George 53, 54, 112
- Rosenstock, I.M. 49, 66
- Roy Burman, B.K. 20, 29
- Roy, B.C. Dr 22, 24, 149, 153
- ruling class interests 12
- Rural Co-operative Dispensary in Kerala 77
- Rural Health Research Centre, Narangwal 39
- rural health services 12
- Rural Internship Study 40, 41
- Russian Revolution 133
- Rural Thematic Appreciation Test 41
- Sahu, S.K. 122, 143
- Sand, Rene 133
- sanitary latrines 7, 96
- sanitation 13
- Schenb, L. 67
- scholastic standard 146
- School of Business Management, D.U. 68
- School of Nursing, Safdarjung Hospital 70
- School of Social Sciences 80, 86
- scientific bridghead 81
- selective primary health care 7

self-reliance 13, 15, 22
selling approaches 91
Shrivastav Committee 81
Sigrist, Henry 133
Sikand & Raj Narain 66, 136
Simmons, G.B. 78
Singh and Banerji 142
Singh, Yogendra 20, 29, 146
Sinha, Durganand 20, 30
Sinha, S. 20, 30
Sinton, J.A. 76, 77
Sitala Mata 65, 66, 118
social analysis 16
social and demographic dimensions 87
social control 7, 95, 137
social dimentions of nutritions 88
social ferment 4
social issues 128-134
social justice 15
social marketing 7, 8
social orientation of medical education 12, 17, 85, 124
social orientation of technology 8, 98
social physicians, 24
social planning for health 100
social relations 5
social responsibilities of social scientist, 8, 19, 74
socially acceptable programme 83, 99, 155
socially sensitive community health physicians 126, 128
social sciences 6, 47
social science and education and training, 79
social science, areas 3
social science, disciplines 3
social science in family planning 17
social science in health 17, 20
social sciences in health field 20
social sciences in health, new trend 134
social sciences in health services 21
social sciences in India 29
—manpower requirements 19
—conceptual foundations 19
—methodological foundation 19
—hierarchy in students choice of field 20
social science, new perspective 121
social science of health services 21
social sciences, scope 3
social science studies 5
social science studies in tuberculosis 66
social scientists 10, 86, 87
—intellectual challenge 11, 34, 35
—tasks 11
—ethical commitment 11
—competence 11
—work positions 19
social scientists, new types 126
social structure 3
socialisation of health professionals 17, 88
socialisation of nurses 70
—methodological approach 70
Socialist Health Review 134
socialist path of development 108
sociatal naivety 110
socio-cultural processes 5, 8, 9, 95, 103, 115
socio-cultural status 5
Socio-economic School of Population Specialists 107
socio-cultural development 6
socio-cultural limits 5
Socio-cultural School of Population Specialists 115
sociological approaches 8
sociological dimension to epidemiology 98
Sociological Section of NTI 83, 88, 98
sociology 85-88
sociology of conventional social sciences in health 133
sociology of health services development 44
sociology of knowledge 11, 30, 56

sociology of knowledge of family planning 104, 112
 sociology of knowledge of nutrition 71, 74
 sociology of knowledge of social sciences 23, 29, 44-46
 soft-state 12
 Sorokin, P.A. 146
 Srinivas, M.N. 36, 89
 Srinivas and Ramaswamy 57, 59, 108
 Sri Lanka 6, 17
 Sriniketan 16
 starting from people 94
 State Health Education Bureau 84
 Statement on National Health Policy 13, 17, 124, 139
 Stigma 22, 66, 123
 straitjacket 88
 struggle for health 5, 8
 struggle to wrest rights 8
 Stycos, J.M. 56
 substantial achievements 87
 subordination of technology to the people 149
 Sukhatme, P.V. 71, 130
 summary 151-156
 Surajpur and Dilwara 31
 Swami, Subramaniyam 109
 Sweedish Scholars 110, 111
 symbolic system of meaning 94
 synergistic relationship 4
 system study 75
 system analysis 144-145
 Systems' Analysis of Family Planning 58

Tagore, Rabindranath 16
 Takulia, H.S. 42
 Taylor, Carl 33, 38, 40, 41, 43, 69
 taylor made methodology 141
 technocentric approach 7, 102
 techno-centric mass campaign 18, 90
 technological process 9, 103
 terms of trade 30

test run 102
 testing conceptual validity through OR 102
 Thaiyur village 122
 three small streams 52
 Thursham, M. 134
 time-bound target approach 18
 Timmappaya 62, 64, 65, 75
 traditional community change 91, 96
 Trakroo, P.L. 65
 Trakroo and Kapoor 56
 tuberculosis 13
 tuberculosis as human suffering 100
 Tuberculosis Chemo Therapy Centre, Social Studies 67
 two-step communication Model 49

Unani system 22, 23
 UN Advisory Mission 1966 54
 Under nutrition and malnutrition 7
 UNESCO sponsored co-operative study of modern occupations 69
 United Nations Children's Fund 7
 United Nations population concern 33, 52, 57, 107, 110
 United Nations Secretary General 131
 universities and other institutes 85
 University of Michighan 58
 Unknown cases of tuberculosis 66, 136
 unmet felt need 104
 upper classes 13, 15
 urban culture and folk culture 133

US council as foreign relations 110
 US family planning establishment 110
 US foreign policy 30, 54, 110
 US government aid agency 37, 41, 44, 48, 110, 154

US scholars 45, 46, 90
use of social sciences 11

vagabonds 102
Valentine, C.A. 146
value position 31, 47, 102, 133
Van der Creest and Van der Veen 68
Van der Veen, K.U. 66
vested interests 56
vicious circle 89
victim blaming 50, 66, 90, 155
Virchow 133
village based economic order 16
village sanitation 16

Walsh and Warren 7
Water supply 7, 12, 13
Wattal, P.K. 106
weak foundations of social sciences in health 46

Western cultural accretion 31
Western Models 13, 56, 124, 154
Western reference frame 11, 16, 20, 126, 146, 147, 149
—studies based on 28
western system of medicine 4, 80
Western technology 32
western medical practitioners 32
WHO Expert Committee on TB 103
W.H.O. Expert Committee on New Approaches to H.E. 51, 103
Winter, David 41, 140
western systems 80
worry awareness 98
World Bank 59, 111
Wyon John 33, 38, 39

yoga 22

Zurbrigg, Sheila 122, 137, 134

Professor Debabar Banerji (b. 1930) graduated from Medical College, Calcutta in 1953. Even as a student he had been concerned about the relevance of the Western Model of medical education and practice in India. This concern had impelled him to work as a physician in Western Tibet and in the interior Himalayan tribal regions to relate the practice of Western medicine to the conditions obtaining there. He continued this line of work at the National Tuberculosis Institute, Bangalore (1959-64), at the National Institute of Health Administration and Education, New Delhi (1964-71) and at the Centre of Social Medicine and Community Health Jawaharlal Nehru University, New Delhi, where currently he is a Professor. His publications in the form of papers, chapters in books and monographs cover a number of facets of the extensive field of study of relationship between health technology and people and formulating people-oriented health technologies and programmes for India. A study of this relationship in nineteen villages from different parts of India for a period of nine years (1972-81) has been one of his major research contributions. His book, *Poverty, Class and Health Culture in India* contains a part of the report on the study. He is also the author of family Planning in India : A Critique and a Perspective. His more recent works are : *Health and Family Planning Services in India : An Epidemiological, Socio-cultural and a Political Analysis and a Perspective* and *The Making of Health Services of a Country : Postulates a Theory*.

Jacket Printed at : G. K. Fine Art Press

By the Same Author

Health and Family Planning Services in India :
An Epidemiological, Socio-cultural and Political Analysis and a
Perspective
pp. 464+xxi

Rs. 300 (India)
US\$ 40 (Foreign)

Poverty Class and Health Culture
pp. 309+xii

Rs. 100 (India)
US\$ 25 (Foreign)

This is a part of an account of a nine year (1972-81) study in Medical Anthropology covering nineteen villages, with eleven Primary Health Centres, located in eight different States of India. Here, the focus is on social relations and political and socio-cultural processes and changes in rural India.

Lok Paksh

Post Box 10517
NEW DELHI-110067